



07/19/04

**Technical Report for**

**S M Stoller**

**STAR Center- 4.5 Acre Site, Largo, FL**

**110406202**

**Accutest Job Number: F23552**

**Sampling Date: 04/20/04**

**Report to:**

**S M Stoller**

**Cathy.Kelleher@gjo.doe.gov**

**ATTN: Cathy Kelleher**

**Total number of pages in report: 25**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
**Harry Behzadi, Ph.D.**  
**Laboratory Director**

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

Job No: F23552

STAR Center- 4.5 Acre Site, Largo, FL  
Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F23552-1	04/20/04	11:40 JC	04/21/04	AQ	Ground Water	PIN20-TRTI
F23552-2	04/20/04	11:45 JC	04/21/04	AQ	Ground Water	PIN20-TRTE
F23552-3	04/20/04	11:01 JC	04/21/04	AQ	Ground Water	PIN20-RW01
F23552-4	04/20/04	11:04 JC	04/21/04	AQ	Ground Water	PIN20-RW02
F23552-5	04/20/04	11:06 JC	04/21/04	AQ	Ground Water	PIN20-RW03

**Accutest Laboratories Southeast, Inc.**  
**Analytical Narrative**

**Client:** S M Stoller

**Job No:** F23552

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 4/27/2004

5 Samples were collected on 04/20/2004 and were received at Accutest on 04/21/2004 properly preserved, at 2.2 Deg. C and intact. These Samples received an Accutest job number of F23552. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified holding times, calibrations and quality control performance criteria were met.

### **Volatiles by GCMS By Method EPA 624**

**Matrix:** AQ

**Batch ID:** VJ313

All samples were run within holding times.

Samples F23552-1MS, F23552-1MSD were used as the QC samples indicated.

All method blanks for this batch passed with no positive results.

The Blank Spike had Methyl Bromide with a recovery above control limits. This compound was non-detect in all associated samples. Data not adversely affected.

Recoveries for 2-Chloroethyl vinyl ether in the MS/MSD are outside control limits. The Blank Spike had all compounds within control limits, except where noted above. Data not adversely affected.

### **Volatiles by GCMS By Method SW846 8260B**

**Matrix:** AQ

**Batch ID:** VJ315

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Samples F23398-2MS, F23398-2MSD were used as the QC samples indicated.

The Method Blank has a detect of Methylene Chloride at a level less than the reporting limit, but greater than the method detection limit. All associated samples are non-detect for this compound. Data not adversely affected.

### **Extractables by GCMS By Method EPA 625**

**Matrix:** AQ

**Batch ID:** OP10261

All samples were extracted within holding time for method

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Samples F23552-2MS, F23552-2MSD were used as the QC samples indicated.

### **Metals By Method SW846 6010B**

**Matrix:** AQ

**Batch ID:** MP6600

All samples were run within holding times.

All samples were digested within holding time for method

All method blanks for this batch passed with no positive results

Samples F23552-1DUP, F23552-1MS, F23552-1MSD, F23552-1SDL were used as the QC samples for metals.

RPD for Serial Dilution for Arsenic was outside control limits for sample MP6600-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

RPD for Duplicate for Arsenic are outside control limits for sample MP6600-D1. RPD acceptable due to low duplicate and sample concentrations.

## Wet Chemistry By Method EPA 160.2

**Matrix:** AQ

**Batch ID:** GN14313

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Sample F23431-1DUP was used as the QC samples for Solids, Total Suspended.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

Date: April 27, 2004

\_\_\_\_\_  
Sue O. Bell, Project Manager (signature on file)

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI	
<b>Lab Sample ID:</b> F23552-1	<b>Date Sampled:</b> 04/20/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/21/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J007169.D	1	04/21/04	RA	n/a	n/a	VJ313
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI		<b>Date Sampled:</b> 04/20/04
<b>Lab Sample ID:</b> F23552-1		<b>Date Received:</b> 04/21/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	3.2	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		86-115%
17060-07-0	1,2-Dichloroethane-D4	115%		73-126%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	108%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI	<b>Date Sampled:</b> 04/20/04
<b>Lab Sample ID:</b> F23552-1	<b>Date Received:</b> 04/21/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	7.6 B	10	3.5	ug/l	1	04/21/04	04/22/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	3350	300	48	ug/l	1	04/21/04	04/22/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3774

(2) Prep QC Batch: MP6600

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI <b>Lab Sample ID:</b> F23552-1 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 04/20/04 <b>Date Received:</b> 04/21/04 <b>Percent Solids:</b> n/a
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### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	777	4.0	mg/l	1	04/23/04	DM	SW846 6010B/SM 2340B

---

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE	
<b>Lab Sample ID:</b> F23552-2	<b>Date Sampled:</b> 04/20/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/21/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J007172.D	1	04/22/04	RA	n/a	n/a	VJ313
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTE		<b>Date Sampled:</b> 04/20/04
<b>Lab Sample ID:</b> F23552-2		<b>Date Received:</b> 04/21/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	110%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	106%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE		
<b>Lab Sample ID:</b> F23552-2		<b>Date Sampled:</b> 04/20/04
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 04/21/04
<b>Method:</b> EPA 625 EPA 625		<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F005723.D	1	04/23/04	ME	04/23/04	OP10261	SF346
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	5.0	ug/l	
95-48-7	2-Methylphenol	ND	5.0	2.0	ug/l	
	3&4-Methylphenol	ND	5.0	2.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.0	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	2.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.0	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	1.0	ug/l	
120-12-7	Anthracene	ND	5.0	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	3.0	ug/l	
86-74-8	Carbazole	ND	5.0	1.0	ug/l	
218-01-9	Chrysene	ND	5.0	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	PIN20-TRTE	<b>Date Sampled:</b>	04/20/04
<b>Lab Sample ID:</b>	F23552-2	<b>Date Received:</b>	04/21/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 625 EPA 625		
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	2.0	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	10	5.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.0	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	2.5	ug/l	
206-44-0	Fluoranthene	ND	5.0	1.0	ug/l	
86-73-7	Fluorene	ND	5.0	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
78-59-1	Isophorone	ND	5.0	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	2.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	1.0	ug/l	
129-00-0	Pyrene	ND	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		19-90%
4165-62-2	Phenol-d5	23%		10-68%
118-79-6	2,4,6-Tribromophenol	84%		36-137%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE		<b>Date Sampled:</b> 04/20/04
<b>Lab Sample ID:</b> F23552-2		<b>Date Received:</b> 04/21/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		49-119%
321-60-8	2-Fluorobiphenyl	67%		45-118%
1718-51-0	Terphenyl-d14	86%		46-135%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE <b>Lab Sample ID:</b> F23552-2 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 04/20/04 <b>Date Received:</b> 04/21/04 <b>Percent Solids:</b> n/a
--	---

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.5 U	10	3.5	ug/l	1	04/21/04	04/22/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	3510	300	48	ug/l	1	04/21/04	04/22/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3774

(2) Prep QC Batch: MP6600

RL = Reporting Limit  
 MDL = Method Detection Limit

U = Indicates a result < MDL  
 B = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE	<b>Date Sampled:</b> 04/20/04
<b>Lab Sample ID:</b> F23552-2	<b>Date Received:</b> 04/21/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	822	4.0		mg/l	1	04/23/04	DM	SW846 6010B/SM 2340B
Solids, Total Suspended	4.0 U	4.0	4.0	mg/l	1	04/21/04 12:16	LE	EPA 160.2
pH	8.3			su	1	04/21/04	LE	EPA 150.1

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL



## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01		<b>Date Sampled:</b> 04/20/04
<b>Lab Sample ID:</b> F23552-3		<b>Date Received:</b> 04/21/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	7.4	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		86-115%
17060-07-0	1,2-Dichloroethane-D4	97%		73-126%
2037-26-5	Toluene-D8	91%		86-112%
460-00-4	4-Bromofluorobenzene	92%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02	
<b>Lab Sample ID:</b> F23552-4	<b>Date Sampled:</b> 04/20/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/21/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J007203.D	1	04/22/04	RA	n/a	n/a	VJ315
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02		<b>Date Sampled:</b> 04/20/04
<b>Lab Sample ID:</b> F23552-4		<b>Date Received:</b> 04/21/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	1.2	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		86-115%
17060-07-0	1,2-Dichloroethane-D4	96%		73-126%
2037-26-5	Toluene-D8	91%		86-112%
460-00-4	4-Bromofluorobenzene	92%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03	
<b>Lab Sample ID:</b> F23552-5	<b>Date Sampled:</b> 04/20/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/21/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J007204.D	1	04/22/04	RA	n/a	n/a	VJ315
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03		<b>Date Sampled:</b> 04/20/04
<b>Lab Sample ID:</b> F23552-5		<b>Date Received:</b> 04/21/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	4.9	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		86-115%
17060-07-0	1,2-Dichloroethane-D4	97%		73-126%
2037-26-5	Toluene-D8	92%		86-112%
460-00-4	4-Bromofluorobenzene	93%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F23552  
 Client: S.M Stoller Project: STAR Center - 4.5 ACRE  
 Date Received: 4/21/04 Time Received: 08:00  
 # of Coolers Received: 5 Cooler Temperatures: 1.6 1.4 2.0 2.2 1.2  
 Delivery Method:  FedEx  UPS  Accutest Courier  Greyhound  Delivery  Other  
 Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Chain of Custody Provided ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
COC Match Bottle Label ID's ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sample Labels Present on all bottles ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
All Analyses Marked On COC ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Are All Bottles Intact ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Samples Preserved Correctly ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Correct Number of Containers Used ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sufficient Sample Volume ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Trip Blank Provided ?	Yes	<input checked="" type="radio"/> No	
Trip Blank on COC ?	Yes	<input checked="" type="radio"/> No	
Trip Blank Intact ?	Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
Trip Blank Matrix ?	Soil	Water	<input checked="" type="radio"/> N/A
Number of Encores ?	<u>0</u>		
Number of Soil Field Kits ?	<u>0</u>		

Summary of Comments: \_\_\_\_\_

Signature: Carlos Date: 4/21/04  
 Review Signature: \_\_\_\_\_

ASBD 12/30/03

F23552: Chain of Custody  
 Page 2 of 2

4.1  
 4



07/19/04

Technical Report for

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F23553

Sampling Date: 04/20/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **8**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F23553

STAR Center- 4.5 Acre Site, Largo, FL  
Project No: 110406202

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
F23553-1	04/20/04	11:50 JC	04/21/04	AQ	Ground Water	PIN20-TRTE-N002

**Accutest Laboratories Southeast, Inc.  
Analytical Narrative**

**Client:** S M Stoller

**Job No:** F23553

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 4/27/2004

1 Sample was collected on 04/20/2004 and were received at Accutest on 04/21/2004 properly preserved, at 3.8 Deg. C and intact. These Samples received an Accutest job number of F23553. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

All method specified holding times, calibrations and quality control performance criteria were met.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other than conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

Date: April 27, 2004

\_\_\_\_\_  
Sue O. Bell, Project Manager (signature on file)

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N002	<b>Date Sampled:</b> 04/20/04
<b>Lab Sample ID:</b> F23553-1	<b>Date Received:</b> 04/21/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624	
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	J007173.D	1	04/22/04	RA	n/a	n/a	VJ313
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	111%		73-126%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	106%		83-119%

(a) Sample collected on 04/20/04 at 11:50.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

CLIENT INFORMATION			FACILITY INFORMATION				ANALYTICAL INFORMATION				MATRIX CODES	
NAME: <u>S.M. Stoller</u> ADDRESS: <u>7887 Bryan Dairy Rd, Suite 260</u> <u>Largo FL 33777</u> CITY, STATE, ZIP Keith Miller SEND REPORT TO: PHONE # <u>970-248-6598</u>			PROJECT NAME: <u>STAR Center - 4.5 Acre startup</u> LOCATION: <u>Largo, FL</u> PROJECT NO.: <u>110406202</u> Onsite contact: <u>Julian Caballero</u> FAX # <u>727-549-1121</u>				DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OL - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID				LAB USE ONLY	
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	DATE	TIME	SAMPLED BY:	MATRIX	NO. OF BOTTLES						PRESERVATION
	<u>① PIN20-TRTE-N002</u>	<u>4-20-04</u>	<u>1150</u>	<u>af</u>	<u>GW</u>	<u>3</u>	<u>3</u>					
DATA TURNAROUND INFORMATION <input type="checkbox"/> STANDARD <input checked="" type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER APPROVED BY: _____ EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED			DATA DELIVERABLE INFORMATION <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____				COMMENTS/REMARKS <u>Benzene</u> <u>Xylenes</u> <u>Toluene</u> <u>Total VOAs</u> <u>Ethylbenzene</u>					
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY												
RELINQUISHED BY: <u>1. [Signature]</u>	DATE TIME: <u>4-20-04/1410</u>	RECEIVED BY: <u>1. C. [Signature]</u>	RELINQUISHED BY: <u>2. C.O.C. IN COOLER</u>	DATE TIME:	RECEIVED BY: <u>[Signature]</u>							
RELINQUISHED BY: <u>3.</u>	DATE TIME:	RECEIVED BY: <u>3.</u>	RELINQUISHED BY: <u>4.</u>	DATE TIME:	RECEIVED BY: <u>4.</u>							
RELINQUISHED BY: <u>5.</u>	DATE TIME:	RECEIVED BY: <u>5.</u>	SEAL #	PRESERVE WHERE APPLICABLE	ON ICE	TEMPERATURE <u>C</u>						

4.1  
4

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: **F23553**  
 Client: S.M Stoller Project: Star Center 4.5 Acre  
 Date Received: 4/21/04 Time Received: 08:00  
 # of Coolers Received: 1 Cooler Temperatures: 3.8  
 Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other  
 Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact ?	<u>Yes</u>	No
Chain of Custody Provided ?	<u>Yes</u>	No
COC Match Bottle Label ID's ?	<u>Yes</u>	No
Sample Labels Present on all bottles ?	<u>Yes</u>	No
All Analyses Marked On COC ?	<u>Yes</u>	No
Are All Bottles Intact ?	<u>Yes</u>	No
Samples Preserved Correctly ?	<u>Yes</u>	No
Correct Number of Containers Used ?	<u>Yes</u>	No
Sufficient Sample Volume ?	<u>Yes</u>	No
Trip Blank Provided ?	Yes	<u>No</u>
Trip Blank on COC ?	Yes	<u>No</u>
Trip Blank Intact ?	Yes	No <u>N/A</u>
Trip Blank Matrix ?	Soil	Water <u>N/A</u>
Number of Encores ?	<u>0</u>	
Number of Soil Field Kits ?	<u>0</u>	

Summary of Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: Charles B Date: 4/21/04  
 Review Signature: \_\_\_\_\_

ASBD 12/30/03

4.1  
4

F23553: Chain of Custody  
 Page 2 of 2



07/19/04

Technical Report for

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F23692

Sampling Date: 04/26/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **25**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F23692

STAR Center- 4.5 Acre Site, Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F23692-1	04/26/04	11:45 JC	04/27/04	AQ	Ground Water	PIN20-TRTI-N001
F23692-2	04/26/04	11:48 JC	04/27/04	AQ	Ground Water	PIN20-TRTE-N001
F23692-3	04/26/04	11:37 JC	04/27/04	AQ	Ground Water	PIN20-RW01-N001
F23692-4	04/26/04	11:40 JC	04/27/04	AQ	Ground Water	PIN20-RW02-N001
F23692-5	04/26/04	11:43 JC	04/27/04	AQ	Ground Water	PIN20-RW03-N001

**Accutest Laboratories Southeast, Inc.**  
**Analytical Narrative**

**Client:** S M Stoller

**Job No:** F23692

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 5/11/2004

5 Samples were collected on 04/26/2004 and were received at Accutest on 04/27/2004 properly preserved, at 4.2 Deg. C and intact. These Samples received an Accutest job number of F23692. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified holding times, calibrations and quality control performance criteria were met.

### **Volatiles by GCMS By Method EPA 624**

**Matrix:** AQ

**Batch ID:** VC986

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Samples F23554-2MS, F23554-2MSD were used as the QC samples indicated.

Recoveries for 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,2-Dichloroethane, 1,2-Dichloropropane, 2-Chloroethyl vinyl ether, Bromodichloromethane, Bromoform, Chloroform, cis-1,2-Dichloroethylene, cis-1,3-Dichloropropene, Dibromochloromethane, m,p-Xylene, Methyl Tert Butyl Ether, Methylene chloride, o-Dichlorobenzene, trans-1,3-Dichloropropene, Carbon tetrachloride, Chloroethane, Ethylbenzene, Tetrachloroethylene, Toluene, Trichlorofluoromethane, Vinyl chloride are outside control limits. The Blank Spike was within limits. Data not adversely affected.

### **Volatiles by GCMS By Method SW846 8260B**

**Matrix:** AQ

**Batch ID:** VJ319

All samples were run within holding times.

Samples F23693-1MS, F23693-1MSD were used as the QC samples indicated.

All method blanks for this batch passed with no positive results

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

### **Extractables by GCMS By Method EPA 625**

**Matrix:** AQ

**Batch ID:** OP10289

All samples were extracted within holding time for method

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Sample(s) F23692-2MS, F23692-2MSD were used as the QC samples indicated.

### **Metals By Method SW846 6010B**

**Matrix:** AQ

**Batch ID:** MP6619

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Samples F23639-1DUP, F23639-1MS, F23639-1MSD, F23639-1SDL were used as the QC samples for metals.

RPD for Serial Dilution for Iron is outside control limits. The Blank Spike was within limits. Data not adversely affected.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by: \_\_\_\_\_

Date: May 12, 2004

Sue O. Bell, Project Manager (signature on file)



## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTI-N001		<b>Date Sampled:</b> 04/26/04
<b>Lab Sample ID:</b> F23692-1		<b>Date Received:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	1.8	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	104%		73-126%
2037-26-5	Toluene-D8	104%		86-112%
460-00-4	4-Bromofluorobenzene	104%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 04/26/04
<b>Lab Sample ID:</b> F23692-1	<b>Date Received:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	1690	300	48	ug/l	1	04/27/04	04/28/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3782

(2) Prep QC Batch: MP6619

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 04/26/04
<b>Lab Sample ID:</b> F23692-1	<b>Date Received:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	839	4.0	mg/l	1	04/29/04	DM	SW846 6010B/SM 2340B

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23692-2	<b>Date Sampled:</b> 04/26/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/27/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0022876.D	1	04/29/04	KW	n/a	n/a	VC986
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23692-2	<b>Date Sampled:</b> 04/26/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/27/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	103%		73-126%
2037-26-5	Toluene-D8	104%		86-112%
460-00-4	4-Bromofluorobenzene	103%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

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<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 04/26/04
<b>Lab Sample ID:</b> F23692-2	<b>Date Received:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625	
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021316.D	1	04/27/04	ME	04/27/04	OP10289	SL1147
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	840 ml	1.0 ml
Run #2		

**ABN TCL List**

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	30	18	ug/l	
95-57-8	2-Chlorophenol	ND	6.0	2.4	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	6.0	2.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	6.0	2.4	ug/l	
105-67-9	2,4-Dimethylphenol	ND	6.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	30	12	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	12	6.0	ug/l	
95-48-7	2-Methylphenol	ND	6.0	2.4	ug/l	
	3&4-Methylphenol	ND	6.0	2.4	ug/l	
88-75-5	2-Nitrophenol	ND	6.0	2.4	ug/l	
100-02-7	4-Nitrophenol	ND	30	12	ug/l	
87-86-5	Pentachlorophenol	ND	30	12	ug/l	
108-95-2	Phenol	ND	6.0	2.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	6.0	2.4	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	6.0	2.4	ug/l	
83-32-9	Acenaphthene	ND	6.0	1.2	ug/l	
208-96-8	Acenaphthylene	ND	6.0	1.2	ug/l	
120-12-7	Anthracene	ND	6.0	1.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	6.0	1.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	6.0	1.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	6.0	1.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	6.0	2.4	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	6.0	1.2	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	6.0	1.2	ug/l	
85-68-7	Butyl benzyl phthalate	ND	6.0	2.4	ug/l	
100-51-6	Benzyl Alcohol	ND	6.0	1.2	ug/l	
91-58-7	2-Chloronaphthalene	ND	6.0	1.2	ug/l	
106-47-8	4-Chloroaniline	ND	12	3.6	ug/l	
86-74-8	Carbazole	ND	6.0	1.2	ug/l	
218-01-9	Chrysene	ND	6.0	1.2	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	6.0	1.2	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	6.0	2.4	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	PIN20-TRTE-N001	<b>Date Sampled:</b>	04/26/04
<b>Lab Sample ID:</b>	F23692-2	<b>Date Received:</b>	04/27/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 625 EPA 625		
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	6.0	1.2	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	6.0	1.2	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	6.0	1.2	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	6.0	1.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	6.0	1.2	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	6.0	2.4	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	6.0	2.4	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	12	6.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	6.0	2.4	ug/l	
132-64-9	Dibenzofuran	ND	6.0	1.2	ug/l	
84-74-2	Di-n-butyl phthalate	ND	6.0	2.4	ug/l	
117-84-0	Di-n-octyl phthalate	ND	6.0	3.0	ug/l	
84-66-2	Diethyl phthalate	ND	6.0	2.4	ug/l	
131-11-3	Dimethyl phthalate	ND	6.0	2.4	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	6.0	3.0	ug/l	
206-44-0	Fluoranthene	ND	6.0	1.2	ug/l	
86-73-7	Fluorene	ND	6.0	1.2	ug/l	
118-74-1	Hexachlorobenzene	ND	6.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	6.0	2.4	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	6.0	2.4	ug/l	
67-72-1	Hexachloroethane	ND	6.0	2.4	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	6.0	2.4	ug/l	
78-59-1	Isophorone	ND	6.0	1.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	6.0	1.2	ug/l	
88-74-4	2-Nitroaniline	ND	6.0	2.4	ug/l	
99-09-2	3-Nitroaniline	ND	6.0	2.4	ug/l	
100-01-6	4-Nitroaniline	ND	6.0	2.4	ug/l	
91-20-3	Naphthalene	ND	6.0	1.2	ug/l	
98-95-3	Nitrobenzene	ND	6.0	1.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	6.0	2.4	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.0	2.4	ug/l	
85-01-8	Phenanthrene	ND	6.0	1.2	ug/l	
129-00-0	Pyrene	ND	6.0	1.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	6.0	1.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		19-90%
4165-62-2	Phenol-d5	29%		10-68%
118-79-6	2,4,6-Tribromophenol	80%		36-137%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 04/26/04
<b>Lab Sample ID:</b> F23692-2		<b>Date Received:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		49-119%
321-60-8	2-Fluorobiphenyl	67%		45-118%
1718-51-0	Terphenyl-d14	79%		46-135%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001 <b>Lab Sample ID:</b> F23692-2 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 04/26/04 <b>Date Received:</b> 04/27/04 <b>Percent Solids:</b> n/a
---	---

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	1780	300	48	ug/l	1	04/27/04	04/28/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3782

(2) Prep QC Batch: MP6619

RL = Reporting Limit  
 MDL = Method Detection Limit

U = Indicates a result < MDL  
 B = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 04/26/04
<b>Lab Sample ID:</b> F23692-2	<b>Date Received:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	844	4.0	mg/l	1	04/29/04	DM	SW846 6010B/SM 2340B

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F23692-3	<b>Date Sampled:</b> 04/26/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/27/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J007302.D	1	04/28/04	RA	n/a	n/a	VJ319
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.2	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis



<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F23692-3	<b>Date Sampled:</b> 04/26/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/27/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	7.8	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
17060-07-0	1,2-Dichloroethane-D4	96%		73-126%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	94%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	
<b>Lab Sample ID:</b> F23692-4	<b>Date Sampled:</b> 04/26/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/27/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J007303.D	1	04/28/04	RA	n/a	n/a	VJ319
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001		<b>Date Sampled:</b> 04/26/04
<b>Lab Sample ID:</b> F23692-4		<b>Date Received:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	0.90	1.0	0.50	ug/l	J
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		86-115%
17060-07-0	1,2-Dichloroethane-D4	98%		73-126%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	95%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F23692-5	<b>Date Sampled:</b> 04/26/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/27/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J007304.D	1	04/28/04	RA	n/a	n/a	VJ319
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F23692-5	<b>Date Sampled:</b> 04/26/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/27/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	5.9	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		86-115%
17060-07-0	1,2-Dichloroethane-D4	99%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	94%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: **F23692**  
ACCUTEST DATE:

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION				MATRIX CODES		
<b>S.M. Stoller</b> NAME 7887 Bryan Dairy Rd., Suite 260 ADDRESS Largo FL 33777 CITY, STATE ZIP Keith Miller SEND REPORT TO: PHONE # 970-248-6598		<b>STAR Center - 45 Ave startup</b> PROJECT NAME Largo, FL LOCATION 110406202 PROJECT NO. Onsite contact: Julian Caballero FAX # 727-549-1121				VOC - 8260 VOC - 624 SVOCs - 625 Fe + Hardness				DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL BL - SLUDGE OL - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID		
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			MATRIX	PRESERVATION				LAB USE ONLY		
		DATE	TIME	SAMPLED BY:		NO. OF BOTTLES	NO.	NO.	NO.		NO.	
①	PIN20-TRTE-N001	4-26-04	1145	gf	GW	4	3	1		3		
②	PIN20-TRTE-N001		1148	gf		6	3	1	2	3	2	1
③	PIN20-RW01-N001		1137	gf		3	3			3		
④	PIN20-RW02-N001		1140	gf		3	3			3		
⑤	PIN20-RW03-N001		1143	gf		3	3			3		
<b>DATA TURNAROUND INFORMATION</b> <input type="checkbox"/> STANDARD APPROVED BY: _____ <input checked="" type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER _____ EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED		<b>DATA DELIVERABLE INFORMATION</b> <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____				<b>COMMENTS/REMARKS</b>   						
<b>SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY</b>												
RELINQUISHED BY SAMPLER: E. P. C.	DATE TIME: 4-26-04	RECEIVED BY: 1. E. P. C.	DATE TIME: 4/26/04	RELINQUISHED BY: 2. J. Caballero	DATE TIME: 18:35	RECEIVED BY: 2. J. Caballero	DATE TIME: 4/27/04	0800				
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	DATE TIME:	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.	DATE TIME:					
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	DATE TIME:	SEAL #	PRESERVE WHERE APPLICABLE	ON ICE	TEMPERATURE	C				

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F23692: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F23692  
 Client: G.M. Stoller Project: Star Center 4.5 Area  
 Date Received: 4/27/04 Time Received: 08:00  
 # of Coolers Received: 1 Cooler Temperatures: 4.2  
 Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other  
 Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Chain of Custody Provided ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
COC Match Bottle Label ID's ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Sample Labels Present on all bottles ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
All Analyses Marked On COC ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Are All Bottles Intact ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Samples Preserved Correctly ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Correct Number of Containers Used ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Sufficient Sample Volume ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Trip Blank Provided ?	Yes	<input checked="" type="radio"/> No
Trip Blank on COC ?	Yes	<input checked="" type="radio"/> No
Trip Blank Intact ?	Yes	No <u>N/A</u>
Trip Blank Matrix ?	Soil	Water <u>N/A</u>
Number of Encores ?	<u>0</u>	
Number of Soil Field Kits ?	<u>0</u>	

Summary of Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: Carlos Date: 4/27/04  
 Review Signature: \_\_\_\_\_

ASBD 12/30/03

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F23692: Chain of Custody  
 Page 2 of 2



07/19/04

Technical Report for

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F23716

Sampling Date: 04/27/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **24**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F23716

STAR Center- 4.5 Acre Site, Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F23716-1	04/27/04	10:40 JC	04/28/04	AQ	Ground Water	PIN20-TRTI-N001
F23716-2	04/27/04	10:43 JC	04/28/04	AQ	Ground Water	PIN20-TRTE-N001
F23716-3	04/27/04	10:30 JC	04/28/04	AQ	Ground Water	PIN20-RW01-N001
F23716-4	04/27/04	10:34 JC	04/28/04	AQ	Ground Water	PIN20-RW02-N001
F23716-5	04/27/04	10:37 JC	04/28/04	AQ	Ground Water	PIN20-RW03-N001

**Accutest Laboratories Southeast, Inc.  
Analytical Narrative**

**Client:** S M Stoller

**Job No:** F23716

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 5/5/2004

5 Samples were collected on 04/27/2004 and were received at Accutest on 04/28/2004 properly preserved, at 4.6 Deg. C and intact. These Samples received an Accutest job number of F23716. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. All samples except for F23716-2 (PIN20-TRTE-N001) were treated with an anti-foaming agent and are footnoted accordingly.

Except as noted below, all method specified holding times, calibrations and quality control performance criteria were met.

**Volatiles by GCMS By Method EPA 624**

**Matrix:** AQ

**Batch ID:** VG1035

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Samples F23511-4MS were used as the QC samples indicated.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

**Volatiles by GCMS By Method SW846 8260B**

**Matrix:** AQ

**Batch ID:** VG1036

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Samples F23542-4MS, F23542-4MSD were used as the QC samples indicated.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

**Extractables by GCMS By Method EPA 625**

**Matrix:** AQ

**Batch ID:** OP10306

All samples were run within holding times.

All samples were extracted within holding time for method

Samples F23741-2MS, F23741-2MSD were used as the QC samples indicated.

All method blanks for this batch passed with no positive results

**Metals By Method SW846 6010B**

**Matrix:** AQ

**Batch ID:** MP6630

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Samples F23580-2MS, F23580-2MSD, F23580-2SDL, F23580-2DUP were used as the QC samples for metals.

RPD for Serial Dilution for Iron is outside control limits. The Blank Spike was within limits. Data not adversely affected.

RPD for Duplicate for Iron is outside control limits. The Blank Spike was within limits. Data not adversely affected .

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

Date: May 13, 2004

Sue O. Bell, Project Manager (signature on file)

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F23716-1	<b>Date Sampled:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0027976.D	1	04/30/04	JG	n/a	n/a	VG1035
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.2	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001		<b>Date Sampled:</b> 04/27/04
<b>Lab Sample ID:</b> F23716-1		<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	5.3	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	95%		73-126%
2037-26-5	Toluene-D8	93%		86-112%
460-00-4	4-Bromofluorobenzene	94%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI-N001 <b>Lab Sample ID:</b> F23716-1 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 04/27/04 <b>Date Received:</b> 04/28/04 <b>Percent Solids:</b> n/a
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### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	3920	300	48	ug/l	1	04/29/04	04/29/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3784

(2) Prep QC Batch: MP6630

RL = Reporting Limit  
 MDL = Method Detection Limit

U = Indicates a result < MDL  
 B = Indicates a result > = MDL but < RL

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI-N001 <b>Lab Sample ID:</b> F23716-1 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 04/27/04 <b>Date Received:</b> 04/28/04 <b>Percent Solids:</b> n/a
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### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	824	4.0	mg/l	1	05/04/04	DM	SW846 6010B/SM 2340B

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RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23716-2	<b>Date Sampled:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0027977.D	1	04/30/04	JG	n/a	n/a	VG1035
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23716-2	<b>Date Sampled:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	99%		73-126%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	95%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23716-2	<b>Date Sampled:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> EPA 625 EPA 625	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021346.D	1	04/29/04	ME	04/29/04	OP10306	SL1148
Run #2							

Run #	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	26	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	5.2	ug/l	
95-48-7	2-Methylphenol	ND	5.2	2.1	ug/l	
	3&4-Methylphenol	ND	5.2	2.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
100-51-6	Benzyl Alcohol	ND	5.2	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	3.1	ug/l	
86-74-8	Carbazole	ND	5.2	1.0	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	PIN20-TRTE-N001	<b>Date Sampled:</b>	04/27/04
<b>Lab Sample ID:</b>	F23716-2	<b>Date Received:</b>	04/28/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 625 EPA 625		
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
132-64-9	Dibenzofuran	ND	5.2	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.2	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	ND	5.2	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.2	2.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.2	2.1	ug/l	
100-01-6	4-Nitroaniline	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		19-90%
4165-62-2	Phenol-d5	23%		10-68%
118-79-6	2,4,6-Tribromophenol	78%		36-137%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 04/27/04
<b>Lab Sample ID:</b> F23716-2		<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%		49-119%
321-60-8	2-Fluorobiphenyl	72%		45-118%
1718-51-0	Terphenyl-d14	78%		46-135%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 04/27/04
<b>Lab Sample ID:</b> F23716-2	<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	3810	300	48	ug/l	1	04/29/04	04/29/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3784

(2) Prep QC Batch: MP6630

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 04/27/04
<b>Lab Sample ID:</b> F23716-2	<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	836	4.0	mg/l	1	05/04/04	DM	SW846 6010B/SM 2340B

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F23716-3	<b>Date Sampled:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0027984.D	1	04/30/04	JG	n/a	n/a	VG1036
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.4	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	<b>Date Sampled:</b> 04/27/04
<b>Lab Sample ID:</b> F23716-3	<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	8.3	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	97%		73-126%
2037-26-5	Toluene-D8	93%		86-112%
460-00-4	4-Bromofluorobenzene	95%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	
<b>Lab Sample ID:</b> F23716-4	<b>Date Sampled:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0027985.D	1	04/30/04	JG	n/a	n/a	VG1036
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.85	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	
<b>Lab Sample ID:</b> F23716-4	<b>Date Sampled:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	1.8	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	100%		73-126%
2037-26-5	Toluene-D8	88%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F23716-5	<b>Date Sampled:</b> 04/27/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0027986.D	1	04/30/04	JG	n/a	n/a	VG1036
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.58	1.0	0.50	ug/l	J
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	PIN20-RW03-N001	<b>Date Sampled:</b>	04/27/04
<b>Lab Sample ID:</b>	F23716-5	<b>Date Received:</b>	04/28/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	13.6	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	97%		73-126%
2037-26-5	Toluene-D8	93%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

**F23716**

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION				MATRIX CODES	
<b>S.M. Stoller</b> NAME 7887 Bryan Dairy Rd, Suite 260 ADDRESS Largo FL 33777 CITY, STATE ZIP Keith Miller SEND REPORT TO: PHONE # 978-248-6598		<b>STAR Center - 4.5 Acre startup</b> PROJECT NAME Largo, FL LOCATION 110406202 PROJECT NO. Onsite contact: Julian Caballero FAX # 727-544-1121				VOCs - 8260 VOCs - 624 SVOCs - 625 Fe + Hardness				DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL BL - BLUDGE OL - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID	
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			PRESERVATION				LAB USE ONLY		
		DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	FCI	MOCK		FIELD	LABORATORY
①	PIN20-TRTI-N001	4-27-04	1040	af	GW	4	3	1	3	1	
②	PIN20-TRTE-N001	↓	1043	af	↓	6	3	1	3	2	1
③	PIN20-RW01-N001	↓	1030	af	↓	3	3		3		
④	PIN20-RW02-N001	↓	1034	af	↓	3	3		3		
⑤	PIN20-RW03-N001	↓	1037	af	↓	3	3		3		
<input type="checkbox"/> STANDARD <input checked="" type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED		<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY)				COMMENTS/REMARKS					
<b>SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY</b>											
RELINQUISHED BY: <i>S.M. Stoller</i>	DATE TIME: 4-27-04/1530	RECEIVED BY: <i>E. M...</i>	RELINQUISHED BY: <i>E. M...</i>	DATE TIME: 4-27-04/2000	RECEIVED BY: <i>S. Taylor</i>	DATE TIME: 4/28/04/0800					
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	DATE TIME:					
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE		ON ICE	TEMPERATURE				

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F23716: Chain of Custody

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ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

**F23716**

Accutest's Job Number: \_\_\_\_\_

Client: S.M Staller Project: STAR-Center

Date Received: 4/28/07 Time Received: 08:00

# of Coolers Received: 1 Cooler Temperatures: 4-6

Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other

Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact ?	<u>Yes</u>	No
Chain of Custody Provided ?	<u>Yes</u>	No
COC Match Bottle Label ID's ?	<u>Yes</u>	No
Sample Labels Present on all bottles ?	<u>Yes</u>	No
All Analyses Marked On COC ?	<u>Yes</u>	No
Are All Bottles Intact ?	<u>Yes</u>	No
Samples Preserved Correctly ?	<u>Yes</u>	No
Correct Number of Containers Used ?	<u>Yes</u>	No
Sufficient Sample Volume ?	<u>Yes</u>	No
Trip Blank Provided ?	Yes	<u>No</u>
Trip Blank on COC ?	Yes	<u>No</u>
Trip Blank Intact ?	Yes	No <u>N/A</u>
Trip Blank Matrix ?	Soil	Water <u>N/A</u>
Number of Encores ?	<u>0</u>	
Number of Soil Field Kits ?	<u>0</u>	

Summary of Comments: \_\_\_\_\_

\_\_\_\_\_

Signature: Carlos J Date: 4/28/07

Review Signature: \_\_\_\_\_

ASBD 12/30/03

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F23716: Chain of Custody  
Page 2 of 2



07/19/04

Technical Report for

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F23741

Sampling Date: 04/28/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **25**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F23741

STAR Center- 4.5 Acre Site, Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F23741-1	04/28/04	10:53 JWW	04/28/04	AQ	Ground Water	PIN20-TRTI-N001
F23741-2	04/28/04	11:05 JWW	04/28/04	AQ	Ground Water	PIN20-TRTE-N001
F23741-3	04/28/04	10:39 JWW	04/28/04	AQ	Ground Water	PIN20-RW01-N001
F23741-4	04/28/04	10:43 JWW	04/28/04	AQ	Ground Water	PIN20-RW02-N001
F23741-5	04/28/04	10:48 JWW	04/28/04	AQ	Ground Water	PIN20-RW03-N001

**Accutest Laboratories Southeast, Inc.  
Analytical Narrative**

**Client:** S M Stoller

**Job No:** F23741

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 5/5/2004

5 Samples were collected on 04/28/2004 and were received at Accutest on 04/28/2004 properly preserved, at 4.2 Deg. C and intact. These Samples received an Accutest job number of F23741. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. All samples were treated with anti-foaming agent and are footnoted accordingly.

Except as noted below, all method specified holding times, calibrations and quality control performance criteria were met.

**Volatiles by GCMS By Method EPA 624**

**Matrix:** AQ

**Batch ID:** VG1035

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Samples F23511-4MS were used as the QC samples indicated.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

**Volatiles by GCMS By Method SW846 8260B**

**Matrix:** AQ

**Batch ID:** VG1036

All samples were run within holding times.

The Method Blank had a detect of Methylene Chloride at a level less than the reporting limit but greater than the method detection limit. All associated samples were non-detect for Methylene Chloride. Data not adversely affected.

Samples F23542-4MS, F23542-4MSD were used as the QC samples indicated.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

**Extractables by GCMS By Method EPA 625**

**Matrix:** AQ

**Batch ID:** OP10306

All samples were run within holding times.

All samples were extracted within holding time for method

Samples F23741-2MS, F23741-2MSD were used as the QC samples indicated.

All method blanks for this batch passed with no positive results

**Metals By Method SW846 6010B**

**Matrix:** AQ

**Batch ID:** MP6630

All samples were run within holding times.

All method blanks for this batch passed with no positive results

Samples F23580-2MS, F23580-2MSD, F23580-2SDL, F23580-2DUP were used as the QC samples for metals.

RPD for Serial Dilution for Iron is outside control limits. The Blank Spike was within limits. Data not adversely affected.

RPD for Duplicate for Iron is outside control limits. The Blank Spike was within limits. Data not adversely affected.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

\_\_\_\_\_  
Sue O. Bell, Project Manager (signature on file)

Date: May 13, 2004

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F23741-1	<b>Date Sampled:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0027978.D	1	04/30/04	JG	n/a	n/a	VG1035
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.98	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F23741-1	<b>Date Sampled:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	5.2	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		86-115%
17060-07-0	1,2-Dichloroethane-D4	97%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	94%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 04/28/04
<b>Lab Sample ID:</b> F23741-1	<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	3610	300	48	ug/l	1	04/29/04	04/29/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3784

(2) Prep QC Batch: MP6630

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI-N001		<b>Date Sampled:</b> 04/28/04
<b>Lab Sample ID:</b> F23741-1		<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	774	4.0	mg/l	1	05/04/04	DM	SW846 6010B/SM 2340B

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RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23741-2	<b>Date Sampled:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0027979.D	1	04/30/04	JG	n/a	n/a	VG1035
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 04/28/04
<b>Lab Sample ID:</b> F23741-2		<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		86-115%
17060-07-0	1,2-Dichloroethane-D4	101%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	95%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23741-2	<b>Date Sampled:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> EPA 625 EPA 625	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021347.D	1	04/29/04	ME	04/29/04	OP10306	SL1148
Run #2							

Run #	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.1	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	5.1	ug/l	
95-48-7	2-Methylphenol	ND	5.1	2.0	ug/l	
	3&4-Methylphenol	ND	5.1	2.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.1	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	2.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.1	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	1.0	ug/l	
120-12-7	Anthracene	ND	5.1	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.1	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	3.0	ug/l	
86-74-8	Carbazole	ND	5.1	1.0	ug/l	
218-01-9	Chrysene	ND	5.1	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 04/28/04
<b>Lab Sample ID:</b> F23741-2		<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.1	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.1	2.0	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	10	5.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.1	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.1	2.5	ug/l	
206-44-0	Fluoranthene	ND	5.1	1.0	ug/l	
86-73-7	Fluorene	ND	5.1	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.1	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	2.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	1.0	ug/l	
129-00-0	Pyrene	ND	5.1	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		19-90%
4165-62-2	Phenol-d5	27%		10-68%
118-79-6	2,4,6-Tribromophenol	85%		36-137%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 04/28/04
<b>Lab Sample ID:</b> F23741-2		<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		49-119%
321-60-8	2-Fluorobiphenyl	77%		45-118%
1718-51-0	Terphenyl-d14	77%		46-135%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 04/28/04
<b>Lab Sample ID:</b> F23741-2	<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	3750	300	48	ug/l	1	04/29/04	04/29/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3784

(2) Prep QC Batch: MP6630

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001 <b>Lab Sample ID:</b> F23741-2 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 04/28/04 <b>Date Received:</b> 04/28/04 <b>Percent Solids:</b> n/a
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### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	774	4.0	mg/l	1	05/04/04	DM	SW846 6010B/SM 2340B

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RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F23741-3	<b>Date Sampled:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0027987.D	1	04/30/04	JG	n/a	n/a	VG1036
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.9	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis



<b>Client Sample ID:</b> PIN20-RW01-N001		<b>Date Sampled:</b> 04/28/04
<b>Lab Sample ID:</b> F23741-3		<b>Date Received:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	8.4	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		86-115%
17060-07-0	1,2-Dichloroethane-D4	94%		73-126%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	
<b>Lab Sample ID:</b> F23741-4	<b>Date Sampled:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0027988.D	1	04/30/04	JG	n/a	n/a	VG1036
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	PIN20-RW02-N001	<b>Date Sampled:</b>	04/28/04
<b>Lab Sample ID:</b>	F23741-4	<b>Date Received:</b>	04/28/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	2.3	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		86-115%
17060-07-0	1,2-Dichloroethane-D4	93%		73-126%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	95%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.5  
3

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F23741-5	<b>Date Sampled:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0027989.D	1	04/30/04	JG	n/a	n/a	VG1036
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.92	1.0	0.50	ug/l	J
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.5  
3

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F23741-5	<b>Date Sampled:</b> 04/28/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/28/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	14.4	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
17060-07-0	1,2-Dichloroethane-D4	92%		73-126%
2037-26-5	Toluene-D8	93%		86-112%
460-00-4	4-Bromofluorobenzene	96%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: **F23741**  
ACCUTEST QUOTE #:

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION				MATRIX CODES					
NAME: <b>SM STOLLER</b>		PROJECT NAME: <b>STAR CENTER - 4.5 ACRE START UP</b>				VOC's - 8260 VOC's - 624 SVOC's - 625 Fe + HARDNESS				DW - DRINKING WATER					
ADDRESS: <b>7887 BRYAN DAIRY RD. SUITE 260</b>		LOCATION: <b>LARGO, FL.</b>								GW - GROUND WATER					
CITY: <b>LARGO</b> STATE: <b>FL</b> ZIP: <b>33777</b>		PROJECT NO.:								WW - WASTE WATER					
SEND REPORT TO: <b>KEITH MILLER</b>		ON SITE CONTACT: <b>JULIAN CABALLERO</b>								SO - SOIL					
PHONE #: <b>970-248-6598</b>		FAX #: <b>727-549-1121</b>								SL - SLUDGE					
ACCTEST SAMPLE #		FIELD ID / POINT OF COLLECTION		COLLECTION		PRESERVATION				LAB USE ONLY					
				DATE	TIME	SAMPLED BY:	MATRIX	COP	BOTTLES	HC1	UNINH	UNHOS	UNHOSB	UNHOSB	UNHOSB
①		PIN20 - TRTI - N001		4-28-04	1053	JWW	SW	4	3	1					
②		PIN20 - TRTE - N001			1105	JWW		6	3	1	2				
③		PIN20 - RW01 - N001			1039	JWW		3	3						
④		PIN20 - RW02 - N001			1043	JWW		3	3						
⑤		PIN20 - RW03 - N001			1048	JWW		3	3						
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION				COMMENTS/REMARKS									
<input type="checkbox"/> STANDARD <input checked="" type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED		APPROVED BY: _____ <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____													
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY															
RELINQUISHED BY: 1. <i>G. Webb</i>		DATE TIME: 4-28-04		RECEIVED BY: 1. <i>J. Miller</i>		DATE TIME: 4/28/04 13:00		RELINQUISHED BY: 2. <i>J. Miller</i>		DATE TIME: 4/28/04		RECEIVED BY: 3. <i>J. Miller</i>		DATE TIME: 4/28/04	
RELINQUISHED BY: 3.		DATE TIME:		RECEIVED BY: 3.		DATE TIME:		RELINQUISHED BY: 4.		DATE TIME:		RECEIVED BY: 4.		DATE TIME:	
RELINQUISHED BY: 5.		DATE TIME:		RECEIVED BY: 5.		DATE TIME:		SEAL # 42		PRESERVE WHERE APPLICABLE		ON ICE		TEMPERATURE C	

4.1  
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ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F23741  
 Client: S.M Stoller Project: Star Center  
 Date Received: 4/29/04 Time Received: 08:00  
 # of Coolers Received: 1 Cooler Temperatures: 4.2  
 Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other  
 Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Chain of Custody Provided ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
COC Match Bottle Label ID's ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sample Labels Present on all bottles ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
All Analyses Marked On COC ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Are All Bottles Intact ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Samples Preserved Correctly ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Correct Number of Containers Used ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sufficient Sample Volume ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Trip Blank Provided ?	Yes	<input checked="" type="radio"/> No	
Trip Blank on COC ?	Yes	<input checked="" type="radio"/> No	
Trip Blank Intact ?	Yes	No	<input checked="" type="radio"/> N/A
Trip Blank Matrix ?	Soil	Water	<input checked="" type="radio"/> N/A
Number of Encores ?	<u>0</u>		
Number of Soil Field Kits ?	<u>0</u>		

Summary of Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: Carlos R Date: 4/29/04

Review Signature: \_\_\_\_\_

ASBD 12/30/03

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F23741: Chain of Custody  
Page 2 of 2



07/20/04

Technical Report for

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F23799

Sampling Date: 04/29/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **24**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F23799

STAR Center- 4.5 Acre Site, Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F23799-1	04/29/04	10:30 JWW	04/29/04	AQ	Ground Water	PIN20-TRTI-N001
F23799-2	04/29/04	10:40 JWW	04/29/04	AQ	Ground Water	PIN20-TRTE-N001
F23799-3	04/29/04	10:09 JWW	04/29/04	AQ	Ground Water	PIN20-RW01-N001
F23799-4	04/29/04	10:15 JWW	04/29/04	AQ	Ground Water	PIN20-RW02-N001
F23799-5	04/29/04	10:22 JWW	04/29/04	AQ	Ground Water	PIN20-RW03-N001

**Accutest Laboratories Southeast, Inc.  
Analytical Narrative**

**Client:** S M Stoller

**Job No:** F23799

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 5/5/2004

5 Samples were collected on 04/29/2004 and were received at Accutest on 04/29/2004 properly preserved, at 4.2 Deg. C and intact. These Samples received an Accutest job number of F23799. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. All samples except for F23799-3 (PIN20-RW01-N001), F23799-4 (PIN20-RW02-N001), F23799-5 (PIN20-RW03-N001) were treated with an anti-foaming agent and are footnoted accordingly. Except as noted below, all method specified holding times, calibrations and quality control performance criteria were met.

**Volatiles by GCMS By Method EPA 624**

**Matrix:** AQ

**Batch ID:** VG1038

All samples were run within holding times.  
All method blanks for this batch passed with no positive results  
Samples F23821-3MS, F23821-3MSD were used as the QC samples indicated.

**Volatiles by GCMS By Method SW846 8260B**

**Matrix:** AQ

**Batch ID:** VB942

All samples were run within holding times.  
All method blanks for this batch passed with no positive results  
Samples F23592-16MS, F23592-16MSD were used as the QC samples indicated.  
Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

**Extractables by GCMS By Method EPA 625**

**Matrix:** AQ

**Batch ID:** OP10325

All samples were run within holding times.  
All method blanks for this batch passed with no positive results  
Samples F23799-2MS, F23799-2MSD were used as the QC samples indicated.  
Recoveries for Benzoic Acid are outside control limits in the MS/MSD. RPDs for 2,4-Dinitrophenol, 3,3'-Dichlorobenzidine, Benzoic Acid are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

**Metals By Method SW846 6010B**

**Matrix:** AQ

**Batch ID:** MP6638

All samples were run within holding times.  
All method blanks for this batch passed with no positive results  
Samples F23799-1DUP, F23799-1MS, F23799-1MSD, F23799-1SDL were used as the QC samples for metals.  
RPD for Serial Dilution for Iron is outside control limits. The Blank Spike was within limits. Data not adversely affected.  
MP6638-SD1 for Iron: Serial dilution indicates possible matrix interference.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

Date: May 13, 2004

Sue O. Bell, Project Manager (signature on file)

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F23799-1	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0028038.D	1	05/03/04	JG	n/a	n/a	VG1038
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.3	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F23799-1	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	6.2	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		86-115%
17060-07-0	1,2-Dichloroethane-D4	95%		73-126%
2037-26-5	Toluene-D8	94%		86-112%
460-00-4	4-Bromofluorobenzene	95%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 04/29/04
<b>Lab Sample ID:</b> F23799-1	<b>Date Received:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	4130	300	48	ug/l	1	05/03/04	05/03/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3786

(2) Prep QC Batch: MP6638

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 04/29/04
<b>Lab Sample ID:</b> F23799-1	<b>Date Received:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	792	4.0	mg/l	1	05/04/04	DM	SW846 6010B/SM 2340B

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23799-2	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0028039.D	1	05/03/04	JG	n/a	n/a	VG1038
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23799-2	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		86-115%
17060-07-0	1,2-Dichloroethane-D4	96%		73-126%
2037-26-5	Toluene-D8	93%		86-112%
460-00-4	4-Bromofluorobenzene	95%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23799-2	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> EPA 625 EPA 625	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W019847.D	1	05/03/04	ME	05/01/04	OP10325	SW1042
Run #2							

Run #	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	26	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	5.2	ug/l	
95-48-7	2-Methylphenol	ND	5.2	2.1	ug/l	
	3&4-Methylphenol	ND	5.2	2.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
100-51-6	Benzyl Alcohol	ND	5.2	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	3.1	ug/l	
86-74-8	Carbazole	ND	5.2	1.0	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	PIN20-TRTE-N001	<b>Date Sampled:</b>	04/29/04
<b>Lab Sample ID:</b>	F23799-2	<b>Date Received:</b>	04/29/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 625 EPA 625		
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
132-64-9	Dibenzofuran	ND	5.2	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.2	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	ND	5.2	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.2	2.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.2	2.1	ug/l	
100-01-6	4-Nitroaniline	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		19-90%
4165-62-2	Phenol-d5	32%		10-68%
118-79-6	2,4,6-Tribromophenol	78%		36-137%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 04/29/04
<b>Lab Sample ID:</b> F23799-2		<b>Date Received:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		49-119%
321-60-8	2-Fluorobiphenyl	75%		45-118%
1718-51-0	Terphenyl-d14	86%		46-135%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 04/29/04
<b>Lab Sample ID:</b> F23799-2	<b>Date Received:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	4140	300	48	ug/l	1	05/03/04	05/03/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3786

(2) Prep QC Batch: MP6638

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTE-N001 <b>Lab Sample ID:</b> F23799-2 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 04/29/04 <b>Date Received:</b> 04/29/04 <b>Percent Solids:</b> n/a
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### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	819	4.0	mg/l	1	05/04/04	DM	SW846 6010B/SM 2340B

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RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F23799-3	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B021703.D	1	05/02/04	JG	n/a	n/a	VB942
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.3	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F23799-3	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	8.1	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		86-115%
17060-07-0	1,2-Dichloroethane-D4	94%		73-126%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	
<b>Lab Sample ID:</b> F23799-4	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B021704.D	1	05/02/04	JG	n/a	n/a	VB942
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.54	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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<b>Client Sample ID:</b> PIN20-RW02-N001	
<b>Lab Sample ID:</b> F23799-4	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	2.1	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
17060-07-0	1,2-Dichloroethane-D4	92%		73-126%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F23799-5	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B021705.D	1	05/02/04	JG	n/a	n/a	VB942
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F23799-5	<b>Date Sampled:</b> 04/29/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 04/29/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	18.0	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
17060-07-0	1,2-Dichloroethane-D4	92%		73-126%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	98%		83-119%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
 DFLAND, FL 32811  
 TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

**F23799**

ACCUTEST QUOTE #:

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION				MATRIX CODES			
NAME: <u>S.M. STOLLER</u> ADDRESS: <u>7887 BRYAN DAIRY RD. SUITE 260</u> CITY: <u>LARGO, FL.</u> STATE: <u>33777</u> ZIP: <u></u> SEND REPORT TO: <u>KEITH MILLER</u> PHONE #: <u>970-248-6598</u>		PROJECT NAME: <u>STAR CENTER - 4.5 ACRE STARTUP</u> LOCATION: <u>LARGO, FL.</u> PROJECT NO.: <u>110406202</u> ON-SITE CONTACT: <u>JULIAN CABALLERO</u> FAX #: <u>727-549-1121</u>				VOCs - 8260 VOCs - 624 SVOCs - 625 Fe + HARDNESS				DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OL - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID			
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION		SAMPLED BY:	MATERIAL	PRESERVATION					LAB USE ONLY		
		DATE	TIME			# OF BOTTLES	REF	NOX	NO3	NO2		NO	
1	PIN 20 - TRT1 - N001	4-29-04	1030	JWW	GW	4	3	1					
2	PIN 20 - TRT2 - N001		1040	JWW		6	3	1	2				
3	PIN 20 - RW01 - N001		1009	JWW		3	3						
4	PIN 20 - RW02 - N001		1015	JWW		3	3						
5	PIN 20 - RW03 - N001		1022	JWW		3	3						

  

DATA TURNAROUND INFORMATION	DATA DELIVERABLE INFORMATION	COMMENTS/REMARKS
<input type="checkbox"/> STANDARD <input checked="" type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER APPROVED BY: _____ EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____	

  

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY**

RELINQUISHED BY SAMPLER: 1. <u>[Signature]</u>	DATE TIME: <u>4-29-04</u>	RECEIVED BY: 1. <u>[Signature]</u>	DATE TIME: <u>4-29-04 13:30</u>	RELINQUISHED BY: 2. <u>[Signature]</u>	DATE TIME: <u>4-29-04 17:50</u>	RECEIVED BY: 2. <u>[Signature]</u>
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	DATE TIME:	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	DATE TIME:	SEAL # <u>4-2</u>	PRESERVE WHERE APPLICABLE <input type="checkbox"/>	ON ICE <input type="checkbox"/>

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F23799: Chain of Custody

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ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F23799  
 Client: S.M. Stoller Project: STAR Center 4.5 ACRE  
 Date Received: 4/30/04 Time Received: 09:00  
 # of Coolers Received: 1 Cooler Temperatures: 4.2  
 Delivery Method:  FedEx  UPS  Accutest Courier  Greyhound  Delivery  Other  
 Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Chain of Custody Provided ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
COC Match Bottle Label ID's ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sample Labels Present on all bottles ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
All Analyses Marked On COC ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Are All Bottles Intact ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Samples Preserved Correctly ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Correct Number of Containers Used ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sufficient Sample Volume ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Trip Blank Provided ?	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Trip Blank on COC ?	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Trip Blank Intact ?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
Trip Blank Matrix ?	<input type="radio"/> Soil	<input type="radio"/> Water	<input checked="" type="radio"/> N/A
Number of Encores ?	<u>0</u>		
Number of Soil Field Kits ?	<u>0</u>		

Summary of Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: Carlos D. Date: 4/30/04  
 Review Signature: \_\_\_\_\_

ASBD 12/30/03

F23799: Chain of Custody  
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07/19/04

Technical Report for

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F23898

Sampling Date: 05/05/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **25**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F23898

STAR Center- 4.5 Acre Site, Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F23898-1	05/05/04	11:28 JC	05/06/04	AQ	Ground Water	PIN20-TRTI-N001
F23898-2	05/05/04	11:33 JC	05/06/04	AQ	Ground Water	PIN20-TRTE-N001
F23898-3	05/05/04	10:05 JC	05/06/04	AQ	Ground Water	PIN20-RW01-N001
F23898-4	05/05/04	10:10 JC	05/06/04	AQ	Ground Water	PIN20-RW02-N001
F23898-5	05/05/04	10:42 JC	05/06/04	AQ	Ground Water	PIN20-RW03-N001

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F23898

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 5/14/2004

5 Samples were collected on 05/05/2004 and were received at Accutest on 05/06/2004 properly preserved, at 3.4 Deg. C and intact. These Samples received an Accutest job number of F23898. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. All samples were treated with an anti-foaming agent and are footnoted accordingly.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Volatiles by GCMS By Method EPA 624

**Matrix:** AQ

**Batch ID:** VG1045

All samples were analyzed within the recommended method holding time.

Samples F23898-2MS, F23898-2MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. RPD for 1,1,1-Trichloroethane is outside control limits in the MS/MSD. The Blank Spike was within control limits. Data not adversely affected.

### Volatiles by GCMS By Method SW846 8260B

**Matrix:** AQ

**Batch ID:** VG1050

All samples were analyzed within the recommended method holding time.

Samples F23751-7MS, F23751-7MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within control limits. Data not adversely affected.

## Extractables by GCMS By Method EPA 625

**Matrix:** AQ

**Batch ID:** OP10371

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Samples F23905-5MS, F23905-5MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Nitrophenol, 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4,6-Dinitro-o-cresol, 4-Chloroaniline, 4-Nitroaniline, 4-Nitrophenol, Benzoic Acid, bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Di-n-octyl phthalate, Dibenzo(a,h)anthracene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Indeno(1,2,3-cd)pyrene, N-Nitroso-di-n-propylamine, Pentachlorophenol, Phenanthrene are outside control limits in the MS/MSD. RPDs for 2,6-Dinitrotoluene, 2-Nitroaniline are outside control limits in the MS/MSD. The Blank Spike was within control limits. Data not adversely affected.

## Metals By Method SW846 6010B

**Matrix:** AQ

**Batch ID:** MP6660

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F23865-3DUP, F23865-3MS, F23865-3MSD, F23865-3SDL were used as the QC samples for metals.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: May 18, 2004

\_\_\_\_\_  
Sue O. Bell, Project Manager (signature on file)

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 05/05/04
<b>Lab Sample ID:</b> F23898-1	<b>Date Received:</b> 05/06/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624	
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0028190.D	1	05/06/04	RAW	n/a	n/a	VG1045
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.6	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.90	1.0	0.50	ug/l	J
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001		<b>Date Sampled:</b> 05/05/04
<b>Lab Sample ID:</b> F23898-1		<b>Date Received:</b> 05/06/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	5.5	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	92%		73-126%
2037-26-5	Toluene-D8	90%		86-112%
460-00-4	4-Bromofluorobenzene	102%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 05/05/04
<b>Lab Sample ID:</b> F23898-1	<b>Date Received:</b> 05/06/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	5960	300	48	ug/l	1	05/07/04	05/11/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3797

(2) Prep QC Batch: MP6660

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 05/05/04
<b>Lab Sample ID:</b> F23898-1	<b>Date Received:</b> 05/06/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	758	4.0	mg/l	1	05/12/04	DM	SW846 6010B/SM 2340B

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RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23898-2	<b>Date Sampled:</b> 05/05/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/06/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0028191.D	1	05/06/04	RAW	n/a	n/a	VG1045
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23898-2	<b>Date Sampled:</b> 05/05/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/06/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
17060-07-0	1,2-Dichloroethane-D4	94%		73-126%
2037-26-5	Toluene-D8	92%		86-112%
460-00-4	4-Bromofluorobenzene	103%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23898-2	<b>Date Sampled:</b> 05/05/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/06/04
<b>Method:</b> EPA 625 EPA 625	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021436.D	1	05/10/04	ME	05/07/04	OP10371	SL1154
Run #2							

Run #	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	26	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.1	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	5.1	ug/l	
95-48-7	2-Methylphenol	ND	5.1	2.0	ug/l	
	3&4-Methylphenol	ND	5.1	2.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.1	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	2.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.1	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	1.0	ug/l	
120-12-7	Anthracene	ND	5.1	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.1	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	3.1	ug/l	
86-74-8	Carbazole	ND	5.1	1.0	ug/l	
218-01-9	Chrysene	ND	5.1	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F23898-2	<b>Date Sampled:</b> 05/05/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/06/04
<b>Method:</b> EPA 625 EPA 625	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.1	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.1	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.1	2.0	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	10	5.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.1	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.1	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.1	1.0	ug/l	
86-73-7	Fluorene	ND	5.1	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.1	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	2.0	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	1.0	ug/l	
129-00-0	Pyrene	ND	5.1	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	32%		19-90%
4165-62-2	Phenol-d5	21%		10-68%
118-79-6	2,4,6-Tribromophenol	74%		36-137%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 05/05/04
<b>Lab Sample ID:</b> F23898-2		<b>Date Received:</b> 05/06/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	61%		49-119%
321-60-8	2-Fluorobiphenyl	63%		45-118%
1718-51-0	Terphenyl-d14	79%		46-135%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 05/05/04
<b>Lab Sample ID:</b> F23898-2	<b>Date Received:</b> 05/06/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	5490	300	48	ug/l	1	05/07/04	05/11/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3797

(2) Prep QC Batch: MP6660

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 05/05/04
<b>Lab Sample ID:</b> F23898-2	<b>Date Received:</b> 05/06/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	708	4.0	mg/l	1	05/12/04	DM	SW846 6010B/SM 2340B

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F23898-3	<b>Date Sampled:</b> 05/05/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/06/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0028289.D	1	05/11/04	RAW	n/a	n/a	VG1050
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.8	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F23898-3	<b>Date Sampled:</b> 05/05/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/06/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	6.6	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		86-115%
17060-07-0	1,2-Dichloroethane-D4	97%		73-126%
2037-26-5	Toluene-D8	91%		86-112%
460-00-4	4-Bromofluorobenzene	94%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	
<b>Lab Sample ID:</b> F23898-4	<b>Date Sampled:</b> 05/05/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/06/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0028290.D	1	05/11/04	RAW	n/a	n/a	VG1050
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.0	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001		<b>Date Sampled:</b> 05/05/04
<b>Lab Sample ID:</b> F23898-4		<b>Date Received:</b> 05/06/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	2.5	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		86-115%
17060-07-0	1,2-Dichloroethane-D4	96%		73-126%
2037-26-5	Toluene-D8	89%		86-112%
460-00-4	4-Bromofluorobenzene	93%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F23898-5	<b>Date Sampled:</b> 05/05/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/06/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	G0028291.D	1	05/11/04	RAW	n/a	n/a	VG1050
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.3	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	4.1	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F23898-5	<b>Date Sampled:</b> 05/05/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/06/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	25.7	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		86-115%
17060-07-0	1,2-Dichloroethane-D4	97%		73-126%
2037-26-5	Toluene-D8	92%		86-112%
460-00-4	4-Bromofluorobenzene	90%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

**F23898**

Accutest's Job Number: \_\_\_\_\_  
 Client: SM Storan Project: 45 Acre Startup  
 Date Received: 05/06/04 Time Received: 0800  
 # of Coolers Received: 1 Cooler Temperatures: 3.4°  
 Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other  
 Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact ?  Yes  No  
 Chain of Custody Provided ?  Yes  No  
 COC Match Bottle Label ID's ?  Yes  No  
 Sample Labels Present on all bottles ?  Yes  No  
 All Analyses Marked On COC ?  Yes  No  
 Are All Bottles Intact ?  Yes  No  
 Samples Preserved Correctly ?  Yes  No  
 Correct Number of Containers Used ?  Yes  No  
 Sufficient Sample Volume ?  Yes  No  
 Trip Blank Provided ? Yes  No  
 Trip Blank on COC ? Yes  No  
 Trip Blank Intact ? Yes  No  N/A  
 Trip Blank Matrix ? Soil  Water  N/A  
 Number of Encores ? 0  
 Number of Soil Field Kits ? 0  
 Summary of Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: [Signature] Date: 05/06/04  
 Review Signature: \_\_\_\_\_

ASBD 12/30/03

F23898: Chain of Custody  
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4.1  
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07/19/04

Technical Report for

S M Stoller

Star Center-4.5 Acre Monthly /Effluent, FL

110406202

Accutest Job Number: F24059

Sampling Date: 05/11/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **8**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F24059

Star Center-4.5 Acre Monthly /Effluent, FL  
Project No: 110406202

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
F24059-1	05/11/04	11:13 JPC	05/12/04	AQ	Ground Water	PIN20-TRTE-N002*4.5 ACRE

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F24059

**Site:** Star Center-4.5 Acre Monthly /Effluent, FL

**Report Date** 5/17/2004

1 Sample was collected on 05/11/2004 and were received at Accutest on 05/12/2004 properly preserved, at 2.6 Deg. C and intact. These Samples received an Accutest job number of F24059. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Volatiles by GCMS By Method EPA 624

**Matrix:** AQ

**Batch ID:** VC1004

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F24061-1MS, F24061-1MSD were used as the QC samples indicated.

F24059-1: Sample was treated with an anti-foaming agent and is footnoted accordingly.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: May 18, 2004

\_\_\_\_\_  
Sue O. Bell, Project Manager (signature on file)

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTE-N002*4.5 ACRE	
<b>Lab Sample ID:</b> F24059-1	<b>Date Sampled:</b> 05/11/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/12/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> Star Center-4.5 Acre Monthly /Effluent, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023328.D	1	05/14/04	KW	n/a	n/a	VC1004
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

### Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene <sup>b</sup>	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		86-115%
17060-07-0	1,2-Dichloroethane-D4	89%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	103%		83-119%

- (a) Sample collected on 05/11/04 at 11:13.
- (b) Sample was treated with an anti-foaming agent.

---

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: **F24059**  
 Client: S.M. Stoller Project: STAR Center - 4.5 Acre monthly effluent  
 Date Received: 5/12/04 Time Received: 08:00

# of Coolers Received: 1 Cooler Temperatures: 2.6°C

Delivery Method: FedEx UPS **Accutest Courier** Greyhound Delivery Other

Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Chain of Custody Provided ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
COC Match Bottle Label ID's ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sample Labels Present on all bottles ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
All Analyses Marked On COC ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Are All Bottles Intact ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Samples Preserved Correctly ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Correct Number of Containers Used ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sufficient Sample Volume ?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Trip Blank Provided ?	Yes	<input checked="" type="radio"/> No	
Trip Blank on COC ?	Yes	<input checked="" type="radio"/> No	
Trip Blank Intact ?	Yes	No	<input checked="" type="radio"/> N/A
Trip Blank Matrix ?	Soil	Water	<input checked="" type="radio"/> N/A
Number of Encores ?	<u>0</u>		
Number of Soil Field Kits ?	<u>0</u>		

Summary of Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**F24059: Chain of Custody**  
**Page 2 of 2**

Signature: [Signature] Date: 5/12/04

Review Signature: \_\_\_\_\_

ASBD 12/30/03



07/19/04

Technical Report for

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F24063

Sampling Date: 05/11/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **24**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F24063

STAR Center- 4.5 Acre Site, Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F24063-1	05/11/04	10:53 JPC	05/12/04	AQ	Ground Water	PIN20-TRTI-N001
F24063-2	05/11/04	11:10 JPC	05/12/04	AQ	Ground Water	PIN20-TRTE-N001
F24063-3	05/11/04	10:41 JPC	05/12/04	AQ	Ground Water	PIN20-RW01-N001
F24063-4	05/11/04	10:46 JPC	05/12/04	AQ	Ground Water	PIN20-RW02-N001
F24063-5	05/11/04	10:49 JPC	05/12/04	AQ	Ground Water	PIN20-RW03-N001

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F24063

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 5/18/2004

5 Samples were collected on 05/11/2004 and were received at Accutest on 05/12/2004 properly preserved, at 2.6 Deg. C and intact. These Samples received an Accutest job number of F24063. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. All volatile samples were treated with an anti-foaming agent and are footnoted accordingly.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Volatiles by GCMS By Method EPA 624

**Matrix:** AQ

**Batch ID:** VC1004

All samples were analyzed within the recommended method holding time.

Samples F24061-1MS, F24061-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

### Volatiles by GCMS By Method SW846 8260B

**Matrix:** AQ

**Batch ID:** VC1003

All samples were analyzed within the recommended method holding time.

Samples F23973-2MS, F23973-2MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

### Extractables by GCMS By Method EPA 625

**Matrix:** AQ

**Batch ID:** OP10438

All samples were analyzed within the recommended method holding time.

All samples were extracted within the recommended method holding time.

Samples F24061-2MS, F24061-2MSD were used as the QC samples indicated.

The Method Blank had a detect on 1,4-Dichlorobenzene. At a level less than the reporting limit but greater than the method detection limit. The associated samples were non-detect for this compound,. Data not adversely affected.

### Metals By Method SW846 6010B

**Matrix:** AQ

**Batch ID:** MP6680

All method blanks for this batch meet method specific criteria.

Samples F24061-1DUP, F24061-1MS, F24061-1MSD, F24061-1SDL were used as the QC samples for metals.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: May 18, 2004

Sue O. Bell, Project Manager (signature on file)

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F24063-1	<b>Date Sampled:</b> 05/11/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/12/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023326.D	1	05/14/04	KW	n/a	n/a	VC1004
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.53	1.0	0.50	ug/l	J
75-25-2	Bromoform	0.66	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	1.2	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F24063-1	<b>Date Sampled:</b> 05/11/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/12/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	4.6	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		86-115%
17060-07-0	1,2-Dichloroethane-D4	89%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	104%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 05/11/04
<b>Lab Sample ID:</b> F24063-1	<b>Date Received:</b> 05/12/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	8240	300	48	ug/l	1	05/13/04	05/14/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3803

(2) Prep QC Batch: MP6680

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 05/11/04
<b>Lab Sample ID:</b> F24063-1	<b>Date Received:</b> 05/12/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	656	4.0	mg/l	1	05/17/04	DM	SW846 6010B/SM 2340B

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24063-2	<b>Date Sampled:</b> 05/11/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/12/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023327.D	1	05/14/04	KW	n/a	n/a	VC1004
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24063-2	<b>Date Sampled:</b> 05/11/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/12/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		86-115%
17060-07-0	1,2-Dichloroethane-D4	89%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	100%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24063-2	<b>Date Sampled:</b> 05/11/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/12/04
<b>Method:</b> EPA 625 EPA 625	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021520.D	1	05/17/04	ME	05/14/04	OP10438	SL1158
Run #2							

Run #	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	26	15	ug/l	
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	5.2	ug/l	
95-48-7	2-Methylphenol	ND	5.2	2.1	ug/l	
	3&4-Methylphenol	ND	5.2	2.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
100-51-6	Benzyl Alcohol	ND	5.2	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	3.1	ug/l	
86-74-8	Carbazole	ND	5.2	1.0	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 05/11/04
<b>Lab Sample ID:</b> F24063-2		<b>Date Received:</b> 05/12/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
132-64-9	Dibenzofuran	ND	5.2	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.2	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	ND	5.2	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.2	2.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.2	2.1	ug/l	
100-01-6	4-Nitroaniline	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		19-90%
4165-62-2	Phenol-d5	29%		10-68%
118-79-6	2,4,6-Tribromophenol	95%		36-137%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 05/11/04
<b>Lab Sample ID:</b> F24063-2		<b>Date Received:</b> 05/12/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		49-119%
321-60-8	2-Fluorobiphenyl	79%		45-118%
1718-51-0	Terphenyl-d14	96%		46-135%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 05/11/04
<b>Lab Sample ID:</b> F24063-2	<b>Date Received:</b> 05/12/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	5700	300	48	ug/l	1	05/13/04	05/14/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3803

(2) Prep QC Batch: MP6680

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 05/11/04
<b>Lab Sample ID:</b> F24063-2	<b>Date Received:</b> 05/12/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	601	4.0	mg/l	1	05/17/04	DM	SW846 6010B/SM 2340B

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F24063-3	<b>Date Sampled:</b> 05/11/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/12/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023305.D	1	05/13/04	KW	n/a	n/a	VC1003
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.2	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis



<b>Client Sample ID:</b> PIN20-RW01-N001		<b>Date Sampled:</b> 05/11/04
<b>Lab Sample ID:</b> F24063-3		<b>Date Received:</b> 05/12/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	7.2	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		86-115%
17060-07-0	1,2-Dichloroethane-D4	89%		73-126%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	103%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	
<b>Lab Sample ID:</b> F24063-4	<b>Date Sampled:</b> 05/11/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/12/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023306.D	1	05/13/04	KW	n/a	n/a	VC1003
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.60	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001		<b>Date Sampled:</b> 05/11/04
<b>Lab Sample ID:</b> F24063-4		<b>Date Received:</b> 05/12/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	3.4	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	91%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	103%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.5  
3

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F24063-5	<b>Date Sampled:</b> 05/11/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/12/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023307.D	1	05/13/04	KW	n/a	n/a	VC1003
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.58	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	3.0	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

3.5  
3

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F24063-5	<b>Date Sampled:</b> 05/11/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/12/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	21.5	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		86-115%
17060-07-0	1,2-Dichloroethane-D4	91%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	106%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:  
ACCUTEST QUOTE #: **F24062**

CLIENT INFORMATION			FACILITY INFORMATION				ANALYTICAL INFORMATION						MATRIX CODES	
S.M. Stoller NAME 7887 Bryson Dairy Rd, Suite 260 ADDRESS Largo FL 33777 CITY, STATE ZIP SEND REPORT TO: PHONE #			STAR Center - 4.5 Acre startup PROJECT NAME LOCATION 110406202 PROJECT NO. FAX #				VOCs - 8260 VOCs - 624 SVOCs - 625 Fe + Hardness						DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID	
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION				PRESERVATION						LAB USE ONLY		
		DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	HCl	NHCl	HNO3	H2O2	NONE			
1	PIN20-TRTI-N001	5-11-04	1053	JPC	GW	4	3	1				3	1	
2	PIN20-TRTE-N001		1110			6	3	1	2			3	2	1
3	PIN20-RW01-N001		1041			3	3					3		
4	PIN20-RW02-N001		1046			3	3					3		
5	PIN20-RW03-N001		1049			3	3					3		
DATA TURNAROUND INFORMATION <input type="checkbox"/> STANDARD APPROVED BY: _____ <input checked="" type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER _____ EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED			DATA DELIVERABLE INFORMATION <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____				COMMENTS/REMARKS Week 2 of 4							
<b>SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY</b>														
RELINQUISHED BY SAMPLER: 6. J.P.C.	DATE TIME: 5-11-04	RECEIVED BY: 1. E. Brown	RELINQUISHED BY: 2. E. Brown	DATE TIME: 5/12/04 17:30	RECEIVED BY: 3. J.P.C.	DATE TIME: 5/12/04 08:00								
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.									
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE <input type="checkbox"/>	ON ICE <input type="checkbox"/>	TEMPERATURE C								

4.1 4

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F24063

Client: S.M. Stoller Project: STAR Center - 4.5 Acre Startup

Date Received: 5/12/04 Time Received: 08:00

# of Coolers Received: 1 Cooler Temperatures: 2.6°C

Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other

Air Bill Number: \_\_\_\_\_

- Cooler Custody Seals Intact ?  Yes  No
- Chain of Custody Provided ?  Yes  No
- COC Match Bottle Label ID's ?  Yes  No
- Sample Labels Present on all bottles ?  Yes  No
- All Analyses Marked On COC ?  Yes  No
- Are All Bottles Intact ?  Yes  No
- Samples Preserved Correctly ?  Yes  No
- Correct Number of Containers Used ?  Yes  No
- Sufficient Sample Volume ?  Yes  No
- Trip Blank Provided ? Yes  No
- Trip Blank on COC ? Yes  No
- Trip Blank Intact ? Yes No  N/A
- Trip Blank Matrix ? Soil Water  N/A
- Number of Encores ? 0
- Number of Soil Field Kits ? 0

Summary of Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: [Signature] Date: 5/12/04

Review Signature: \_\_\_\_\_

ASBD 12/30/03

4.1  
4

F24063: Chain of Custody  
 Page 2 of 2



07/19/04

Technical Report for

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F24234

Sampling Date: 05/18/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **25**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F24234

STAR Center- 4.5 Acre Site, Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F24234-1	05/18/04	10:18 JWW	05/19/04	AQ	Ground Water	PIN20-TRTI-N001
F24234-2	05/18/04	10:08 JWW	05/19/04	AQ	Ground Water	PIN20-TRTE-N001
F24234-3	05/18/04	09:42 JWW	05/19/04	AQ	Ground Water	PIN20-RW01-N001
F24234-4	05/18/04	09:48 JWW	05/19/04	AQ	Ground Water	PIN20-RW02-N001
F24234-5	05/18/04	09:54 JWW	05/19/04	AQ	Ground Water	PIN20-RW03-N001

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F24234

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 5/24/2004

5 Samples were collected on 05/18/2004 and were received at Accutest on 05/19/2004 properly preserved, at 3.2 Deg. C and intact. These Samples received an Accutest job number of F24234. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. All Volatile samples were treated with an anti-foaming agent and are footnoted accordingly.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Volatiles by GCMS By Method EPA 624

**Matrix:** AQ

**Batch ID:** VC1013

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

**Matrix:** AQ

**Batch ID:** VC1015

All samples were analyzed within the recommended method holding time.

Samples F24234-1MS, F24234-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

### Volatiles by GCMS By Method SW846 8260B

**Matrix:** AQ

**Batch ID:** VB949

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F24037-2MS, F24037-2MSD were used as the QC samples indicated.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

### Extractables by GCMS By Method EPA 625

**Matrix:** AQ

**Batch ID:** OP10481

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F24213-2MS, F24213-2MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for Benzo(a)anthracene, Butyl benzyl phthalate, Chrysene, Phenanthrene are outside control

limits in the MS/MSD. RPDs for 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2,4-Dichlorophenol, 2-Chlorophenol, 2-Methylnaphthalene, 2-Methylphenol, 2-Nitrophenol, 3&4-Methylphenol, 4-Bromophenyl phenyl ether, 4-Chloro-3-methyl phenol, Anthracene, Benzyl Alcohol, bis(2-Chloroethoxy)methane, bis(2-Chloroethyl)ether, bis(2-Chloroisopropyl)ether, Carbazole, Dibenzofuran, Fluoranthene, Fluorene, Hexachlorobutadiene, Hexachloroethane, Isophorone, N-Nitroso-di-n-propylamine, Naphthalene, Nitrobenzene, Phenanthrene, Phenol are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

## Metals By Method SW846 6010B

**Matrix:** AQ

**Batch ID:** MP6705

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

All method blanks for this batch meet method specific criteria.

Samples F23913-7DUP, F23913-7MS, F23913-7MSD, F23913-7SDL were used as the QC samples for metals.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

\_\_\_\_\_  
Sue O. Bell, Project Manager

Date: May 24, 2004

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F24234-1	<b>Date Sampled:</b> 05/18/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/19/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023502.D	1	05/20/04	KW	n/a	n/a	VC1013
Run #2	C0023541.D	5	05/22/04	KW	n/a	n/a	VC1015

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	188 <sup>b</sup>	5.0	2.5	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.78	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.68	1.0	0.50	ug/l	J
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F24234-1	<b>Date Sampled:</b> 05/18/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/19/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	3.3	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	98%	86-115%
17060-07-0	1,2-Dichloroethane-D4	94%	95%	73-126%
2037-26-5	Toluene-D8	94%	103%	86-112%
460-00-4	4-Bromofluorobenzene	99%	100%	83-119%

(a) Sample was treated with an anti-foaming agent.

(b) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI-N001 <b>Lab Sample ID:</b> F24234-1 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 05/18/04 <b>Date Received:</b> 05/19/04 <b>Percent Solids:</b> n/a
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### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	5610	300	48	ug/l	1	05/20/04	05/21/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3812

(2) Prep QC Batch: MP6705

RL = Reporting Limit  
 MDL = Method Detection Limit

U = Indicates a result < MDL  
 B = Indicates a result > = MDL but < RL

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTI-N001		<b>Date Sampled:</b> 05/18/04
<b>Lab Sample ID:</b> F24234-1		<b>Date Received:</b> 05/19/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	784	4.0	mg/l	1	05/24/04	DM	SW846 6010B/SM 2340B

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RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24234-2	<b>Date Sampled:</b> 05/18/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/19/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023503.D	1	05/20/04	KW	n/a	n/a	VC1013
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	6.6	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24234-2	<b>Date Sampled:</b> 05/18/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/19/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		86-115%
17060-07-0	1,2-Dichloroethane-D4	94%		73-126%
2037-26-5	Toluene-D8	95%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24234-2	<b>Date Sampled:</b> 05/18/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/19/04
<b>Method:</b> EPA 625 EPA 625	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W020077.D	1	05/20/04	ME	05/20/04	OP10481	SW1056
Run #2							

Run #	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	26	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	5.2	ug/l	
95-48-7	2-Methylphenol	ND	5.2	2.1	ug/l	
	3&4-Methylphenol	ND	5.2	2.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
100-51-6	Benzyl Alcohol	ND	5.2	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	3.1	ug/l	
86-74-8	Carbazole	ND	5.2	1.0	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	PIN20-TRTE-N001	<b>Date Sampled:</b>	05/18/04
<b>Lab Sample ID:</b>	F24234-2	<b>Date Received:</b>	05/19/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 625 EPA 625		
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
132-64-9	Dibenzofuran	ND	5.2	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.2	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	ND	5.2	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.2	2.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.2	2.1	ug/l	
100-01-6	4-Nitroaniline	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		19-90%
4165-62-2	Phenol-d5	26%		10-68%
118-79-6	2,4,6-Tribromophenol	75%		36-137%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 05/18/04
<b>Lab Sample ID:</b> F24234-2		<b>Date Received:</b> 05/19/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		49-119%
321-60-8	2-Fluorobiphenyl	72%		45-118%
1718-51-0	Terphenyl-d14	75%		46-135%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 05/18/04
<b>Lab Sample ID:</b> F24234-2	<b>Date Received:</b> 05/19/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	5620	300	48	ug/l	1	05/20/04	05/21/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3812

(2) Prep QC Batch: MP6705

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001 <b>Lab Sample ID:</b> F24234-2 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 05/18/04 <b>Date Received:</b> 05/19/04 <b>Percent Solids:</b> n/a
---	---

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	760	4.0	mg/l	1	05/24/04	DM	SW846 6010B/SM 2340B

---

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F24234-3	<b>Date Sampled:</b> 05/18/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/19/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	B021886.D	1	05/20/04	KW	n/a	n/a	VB949
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.7	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001		<b>Date Sampled:</b> 05/18/04
<b>Lab Sample ID:</b> F24234-3		<b>Date Received:</b> 05/19/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	6.4	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		86-115%
17060-07-0	1,2-Dichloroethane-D4	90%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	105%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	<b>Date Sampled:</b> 05/18/04
<b>Lab Sample ID:</b> F24234-4	<b>Date Received:</b> 05/19/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	B021887.D	1	05/21/04	KW	n/a	n/a	VB949
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.70	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected      MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	<b>Date Sampled:</b> 05/18/04
<b>Lab Sample ID:</b> F24234-4	<b>Date Received:</b> 05/19/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	3.6	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	88%		73-126%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	106%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F24234-5	<b>Date Sampled:</b> 05/18/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/19/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	B021888.D	1	05/21/04	KW	n/a	n/a	VB949
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.72	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	3.6	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F24234-5	<b>Date Sampled:</b> 05/18/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/19/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	16.2	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	88%		73-126%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	105%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: **F24234**  
ACCUTEST QUOTE #:

**F24234**

11-11-04  
5/19/04

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION				MATRIX CODE		
<b>S.M. Stoller</b> NAME 7887 Bryan Dairy Rd, Suite 260 ADDRESS Largo FL 33777 CITY STATE ZIP SEND REPORT TO: PHONE #		<b>STAR Center - 4.5 Acre startup</b> PROJECT NAME Largo, FL LOCATION 110406202 PROJECT NO. FAX #				VOCs - 826 VOCs - 624 SVOCs - 625 Fe + Hardness				DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID		
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			MATRIX	# OF BOTTLES	PRESERVATION				LAB USE ONLY	
		DATE	TIME	SAMPLED BY:			IC	NOV	VMS	MSC		NOV
1	PIN20-TRTI-N001	5-18-04	1018	JWW	GW	4	3	1				
2	PIN20-TRTE-N001		1008			6	3	1	2			
3	PIN20-RW01-N001		0942			3	3					
4	PIN20-RW02-N001		0948			3	3					
5	PIN20-RW03-N001		0954			3	3					

DATA TURNAROUND INFORMATION	DATA DELIVERABLE INFORMATION	COMMENTS/REMARKS
<input type="checkbox"/> STANDARD <input checked="" type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY)	Week 3 of 4

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY					
RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. [Signature]	5-18-04 1330	1. [Signature]	2. [Signature]	16:45	2. [Signature]
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE	ON ICE
5.		5.		<input type="checkbox"/>	TEMPERATURE 22

4.1  
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ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F24234

Client: S.M. Staller Project: Star Center - 4.5 Acre

Date Received: 5/19/04 Time Received: 8:00

# of Coolers Received: 1 Cooler Temperatures: 3.2

Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other

Air Bill Number: \_\_\_\_\_

- Cooler Custody Seals Intact ?  Yes  No
- Chain of Custody Provided ?  Yes  No
- COC Match Bottle Label ID's ?  Yes  No
- Sample Labels Present on all bottles ?  Yes  No
- All Analyses Marked On COC ?  Yes  No
- Are All Bottles Intact ?  Yes  No
- Samples Preserved Correctly ?  Yes  No
- Correct Number of Containers Used ?  Yes  No
- Sufficient Sample Volume ?  Yes  No
- Trip Blank Provided ? Yes  No
- Trip Blank on COC ? Yes  No
- Trip Blank Intact ? Yes  No  N/A
- Trip Blank Matrix ? Soil  Water  N/A
- Number of Encores ? 0
- Number of Soil Field Kits ? 0

Summary of Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: [Signature] Date: 5/19/04

Review Signature: \_\_\_\_\_

ASBD 12/30/03

4.1  
4

F24234: Chain of Custody  
Page 2 of 2



07/19/04

Technical Report for

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F24381

Sampling Date: 05/25/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **25**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F24381

STAR Center- 4.5 Acre Site, Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F24381-1	05/25/04	10:55 JPC	05/25/04	AQ	Ground Water	PIN20-TRTI-N001
F24381-2	05/25/04	11:00 JPC	05/25/04	AQ	Ground Water	PIN20-TRTE-N001
F24381-3	05/25/04	10:45 JPC	05/25/04	AQ	Ground Water	PIN20-RW01-N001
F24381-4	05/25/04	10:48 JPC	05/25/04	AQ	Ground Water	PIN20-RW02-N001
F24381-5	05/25/04	10:50 JPC	05/25/04	AQ	Ground Water	PIN20-RW03-N001

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F24381

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 6/11/2004

5 Sample were collected on 05/25/2004 and were received at Accutest on 05/25/2004 properly preserved, at 1.2 Deg. C and intact. These Samples received an Accutest job number of F24381. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. Volatile samples treated with a foaming agent are footnoted accordingly.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Volatiles by GCMS By Method EPA 624

**Matrix:** AQ

**Batch ID:** VB965

All samples were analyzed within the recommended method holding time.

Samples F24381-1MS, F24381-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 1,1,2,2-Tetrachloroethane, 2-Chloroethyl vinyl ether are outside control limit in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

RPD for 2-Chloroethyl vinyl ether is outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

**Matrix:** AQ

**Batch ID:** VC1027

All samples were analyzed within the recommended method holding time.

Samples F24474-1MS, F24474-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

### Volatiles by GCMS By Method SW846 8260B

**Matrix:** AQ

**Batch ID:** VB963

All samples were analyzed within the recommended method holding time.

Samples F24324-8MS, F24324-8MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 2-Chloroethyl vinyl ether, Bromoform are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

### Extractables by GCMS By Method EPA 625

**Matrix:** AQ

**Batch ID:** OP10558

All samples were analyzed within the recommended method holding time.

All samples were extracted within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F24381-2MS, F24381-2MSD were used as the QC samples indicated.

Recoveries for 2,4,6-Trichlorophenol, Benzo(a)anthracene, Chrysene, Phenanthrene, Pyrene are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

### Metals By Method SW846 6010B

**Matrix:** AQ

**Batch ID:** MP6746

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F24497-2DUP, F24497-2MS, F24497-2MSD, F24497-2SDL were used as the QC samples for metals.

RPD for Serial Dilution for Iron is outside control limits. The Blank Spike was within limits. Data not adversely affected.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used Narrative prepared by:

Date: June 14, 2004

Sue O. Bell, Project Manager (signature on file)

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F24381-1	<b>Date Sampled:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/25/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023827.D	1	06/03/04	KW	n/a	n/a	VC1027
Run #2	B022246.D	50	06/03/04	KW	n/a	n/a	VB965

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	0.61	1.0	0.50	ug/l	J
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	2460 <sup>b</sup>	50	25	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	0.59	1.0	0.50	ug/l	J
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.72	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001		<b>Date Sampled:</b> 05/25/04
<b>Lab Sample ID:</b> F24381-1		<b>Date Received:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	4.5	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	96%	86-115%
17060-07-0	1,2-Dichloroethane-D4	94%	88%	73-126%
2037-26-5	Toluene-D8	104%	103%	86-112%
460-00-4	4-Bromofluorobenzene	95%	107%	83-119%

- (a) Sample was treated with an anti-foaming agent.
- (b) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 05/25/04
<b>Lab Sample ID:</b> F24381-1	<b>Date Received:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	5860	300	48	ug/l	1	06/03/04	06/04/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3831

(2) Prep QC Batch: MP6746

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 05/25/04
<b>Lab Sample ID:</b> F24381-1	<b>Date Received:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	779	4.0	mg/l	1	06/07/04	DM	SW846 6010B/SM 2340B

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24381-2	<b>Date Sampled:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/25/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	B022249.D	1	06/03/04	KW	n/a	n/a	VB965
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	13.6	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	PIN20-TRTE-N001	<b>Date Sampled:</b>	05/25/04
<b>Lab Sample ID:</b>	F24381-2	<b>Date Received:</b>	05/25/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 624		
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
17060-07-0	1,2-Dichloroethane-D4	87%		73-126%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	108%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24381-2	<b>Date Sampled:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/25/04
<b>Method:</b> EPA 625 EPA 625	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021729.D	1	06/03/04	ME	06/01/04	OP10558	SL1168
Run #2							

Run #	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	26	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	5.2	ug/l	
95-48-7	2-Methylphenol	ND	5.2	2.1	ug/l	
	3&4-Methylphenol	ND	5.2	2.1	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	26.4	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
100-51-6	Benzyl Alcohol	ND	5.2	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	3.1	ug/l	
86-74-8	Carbazole	ND	5.2	1.0	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 05/25/04
<b>Lab Sample ID:</b> F24381-2		<b>Date Received:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
132-64-9	Dibenzofuran	ND	5.2	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.2	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	ND	5.2	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	5.2	2.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.2	2.1	ug/l	
100-01-6	4-Nitroaniline	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		19-90%
4165-62-2	Phenol-d5	35%		10-68%
118-79-6	2,4,6-Tribromophenol	92%		36-137%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 05/25/04
<b>Lab Sample ID:</b> F24381-2		<b>Date Received:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 625 EPA 625		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**ABN TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		49-119%
321-60-8	2-Fluorobiphenyl	86%		45-118%
1718-51-0	Terphenyl-d14	88%		46-135%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 05/25/04
<b>Lab Sample ID:</b> F24381-2	<b>Date Received:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	5570	300	48	ug/l	1	06/03/04	06/04/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3831

(2) Prep QC Batch: MP6746

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

32  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001 <b>Lab Sample ID:</b> F24381-2 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 05/25/04 <b>Date Received:</b> 05/25/04 <b>Percent Solids:</b> n/a
---	---

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	749	4.0	mg/l	1	06/07/04	DM	SW846 6010B/SM 2340B

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RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F24381-3	<b>Date Sampled:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/25/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	B022207.D	1	06/02/04	KW	n/a	n/a	VB963
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.9	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	<b>Date Sampled:</b> 05/25/04
<b>Lab Sample ID:</b> F24381-3	<b>Date Received:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	7.0	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
17060-07-0	1,2-Dichloroethane-D4	86%		73-126%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	108%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	
<b>Lab Sample ID:</b> F24381-4	<b>Date Sampled:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/25/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	B022208.D	1	06/02/04	KW	n/a	n/a	VB963
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.74	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001		<b>Date Sampled:</b> 05/25/04
<b>Lab Sample ID:</b> F24381-4		<b>Date Received:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	5.1	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
17060-07-0	1,2-Dichloroethane-D4	88%		73-126%
2037-26-5	Toluene-D8	103%		86-112%
460-00-4	4-Bromofluorobenzene	108%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F24381-5	<b>Date Sampled:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/25/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	B022209.D	1	06/02/04	KW	n/a	n/a	VB963
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.69	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	2.5	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F24381-5	<b>Date Sampled:</b> 05/25/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 05/25/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	12.5	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		86-115%
17060-07-0	1,2-Dichloroethane-D4	87%		73-126%
2037-26-5	Toluene-D8	103%		86-112%
460-00-4	4-Bromofluorobenzene	106%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
 ORLANDO, FL 32811  
 TEL: 407-425-8700 • FAX: 407-425-0707

ACCUTEST JOB #: **F24381**  
 ACCUTEST QUOTE #:

CLIENT INFORMATION			FACILITY INFORMATION			ANALYTICAL INFORMATION			MATRIX CODES			
NAME: <i>S.M. Stoller</i> ADDRESS: <i>7887 Bryan Dairy Rd</i> CITY: <i>Largo</i> STATE: <i>FL</i> ZIP: <i>33777</i> SEND REPORT TO: PHONE # <i>727-541-8103</i>			PROJECT NAME: <i>STAR Center - 4.5 Acre Startup</i> LOCATION: <i>Largo, FL</i> PROJECT NO.: <i>110406202</i> FAX #			VOCs - 624 SVOCs - 625 Iron + Hardness VOCs - 8260			DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OL - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID			
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			PRESERVATION						LAB USE ONLY	
		DATE	TIME	SAMPLED BY:	MATRIX	L/C	BOTTLES	ICE	NOV	FRAG		NOB04
1	<i>PIN20-TRTE-N001</i>	<i>5/25/04</i>	<i>1055</i>	<i>JPC</i>	<i>GW</i>	<i>4</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
2	<i>PIN20-TRTE-N001</i>		<i>1100</i>			<i>6</i>	<i>✓</i>				<i>✓</i>	
3	<i>PIN20-RWD1-N001</i>		<i>1045</i>			<i>3</i>						
4	<i>PIN20-RWD2-N001</i>		<i>1048</i>			<i>3</i>						
5	<i>PIN20-RWD3-N001</i>		<i>1050</i>			<i>3</i>					<i>✓</i>	
DATA TURNAROUND INFORMATION <input checked="" type="checkbox"/> STANDARD APPROVED BY: _____ <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED			DATA DELIVERABLE INFORMATION <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____			COMMENTS/REMARKS <i>Week 4 of 4</i>						
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY												
RELINQUISHED BY: <i>1. JPC</i>	DATE TIME: <i>5-25-04/1446</i>	RECEIVED BY: <i>1. S.M. Stoller</i>	DATE TIME: <i>14:46</i>	RELINQUISHED BY: <i>2. S.M. Stoller</i>	DATE TIME: <i>19:40</i>	RECEIVED BY: <i>2. Mune Mohammed</i>						
RELINQUISHED BY: <i>3.</i>	DATE TIME:	RECEIVED BY: <i>3.</i>	DATE TIME:	RELINQUISHED BY: <i>4.</i>	DATE TIME:	RECEIVED BY: <i>4.</i>						
RELINQUISHED BY: <i>5.</i>	DATE TIME:	RECEIVED BY: <i>5.</i>	DATE TIME:	SEAL #	PRESERVE WHERE APPLICABLE <input type="checkbox"/>	ON ICE <input type="checkbox"/>	TEMPERATURE <i>12° C</i>					

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F24381: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: **F24381**  
 Client: S.M. Stoller Project: STAR Center - 4.5 Acre Startup Sampling  
 Date Received: 5/25/04 Time Received: 11:40  
 # of Coolers Received: 1 Cooler Temperatures: 1.2°C  
 Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other  
 Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact ?  Yes  No  
 Chain of Custody Provided ?  Yes  No  
 COC Match Bottle Label ID's ? <sup>HM</sup> ~~Yes~~  No  
 Sample Labels Present on all bottles ?  Yes  No  
 All Analyses Marked On COC ?  Yes  No  
 Are All Bottles Intact ?  Yes  No  
 Samples Preserved Correctly ?  Yes  No  
 Correct Number of Containers Used ? Yes  No  
 Sufficient Sample Volume ?  Yes  No  
 Trip Blank Provided ? Yes  No  
 Trip Blank on COC ? Yes  No  
 Trip Blank Intact ? Yes No  N/A  
 Trip Blank Matrix ? Soil Water  N/A  
 Number of Encores ? 0  
 Number of Soil Field Kits ? 0

Summary of Comments: 1 G25 bottle received for samples 1+2.  
COC does not have G25 analysis for sample 1.  
According to times Both Bottles Belong to #2

Signature: Jeff Minter Date: 5/25/04  
 Review Signature: \_\_\_\_\_

ASBD 12/30/03

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F24381: Chain of Custody  
Page 2 of 2



07/19/04

Technical Report for

S M Stoller

STAR Center- 4.5 Acre Site, Largo, FL

110406202

Accutest Job Number: F24498

Sampling Date: 06/01/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **25**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

**Job No:** F24498

STAR Center- 4.5 Acre Site, Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F24498-1	06/01/04	11:01 JPC	06/01/04	AQ	Ground Water	PIN20-RW01-N001
F24498-2	06/01/04	11:03 JPC	06/01/04	AQ	Ground Water	PIN20-RW02-N001
F24498-3	06/01/04	11:06 JPC	06/01/04	AQ	Ground Water	PIN20-RW03-N001
F24498-4	06/01/04	11:08 JPC	06/01/04	AQ	Ground Water	PIN20-TRTI-N001
F24498-5	06/01/04	11:10 JPC	06/01/04	AQ	Ground Water	PIN20-TRTE-N001

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F24498

**Site:** STAR Center- 4.5 Acre Site, Largo, FL

**Report Date** 6/16/2004

5 Samples were collected on 06/01/2004 and were received at Accutest on 06/01/2004 properly preserved, at 3.6 Deg. C and intact. These Samples received an Accutest job number of F24498. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. Volatile samples treated with a foaming agent are footnoted accordingly.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Volatiles by GCMS By Method EPA 624

**Matrix:** AQ

**Batch ID:** VB965

All samples were analyzed within the recommended method holding time.

Samples F24381-1MS, F24381-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 1,1,2,2-Tetrachloroethane, 2-Chloroethyl vinyl ether are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

RPD for MSD for 2-Chloroethyl vinyl ether is outside control limits. The Blank Spike was within limits. Data not adversely affected.

**Matrix:** AQ

**Batch ID:** VC1027

All samples were analyzed within the recommended method holding time.

Samples F24474-1MS, F24474-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits. The Blank Spike was within limits. Data not adversely affected.

### Volatiles by GCMS By Method SW846 8260B

**Matrix:** AQ

**Batch ID:** VJ357

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F24511-6MS, F24511-6MSD were used as the QC samples indicated.

Recoveries for 2-Chloroethyl vinyl ether are outside control limits. The Blank Spike was within limits. Data not adversely affected.

RPDs for MSD for 1,1,1-Trichloroethane, Benzene, Ethylbenzene, m,p-Xylene, Tetrachloroethylene, Toluene, trans-1,2-Dichloroethylene, Trichloroethylene are outside control limits for sample. Recoveries for 2-Chloroethyl vinyl ether are outside control limits. The Blank Spike was within limits. Data not adversely affected.

### Extractables by GCMS By Method EPA 625

**Matrix:** AQ

**Batch ID:** OP10608

All samples were analyzed within the recommended method holding time.

All samples were extracted within the recommended method holding time.

Samples F24498-5MS, F24498-5MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Recoveries for Anthracene, Benzo(a)anthracene, Benzo(k)fluoranthene, Chrysene, Phenanthrene, Pyrene are outside control limits in the MS/MSD. The Blank Spike was within limits. Data not adversely affected.

### Metals By Method SW846 6010B

**Matrix:** AQ

**Batch ID:** MP6754

All samples were analyzed within the recommended method holding time.

All samples were digested within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F24552-11DUP, F24552-11MS, F24552-11MSD, F24552-11SDL were used as the QC samples for metals.

All method blanks for this batch meet method specific criteria.

RPD for Serial Dilution for Iron is outside control limits. The Blank Spike was within limits. Data not adversely affected.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: June 16, 2004

\_\_\_\_\_  
Sue O. Bell, Project Manager (signature on file)

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001	
<b>Lab Sample ID:</b> F24498-1	<b>Date Sampled:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 06/01/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	J008946.D	1	06/10/04	RA	n/a	n/a	VJ357
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.4	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW01-N001		
<b>Lab Sample ID:</b> F24498-1		<b>Date Sampled:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 06/01/04
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	5.6	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		86-115%
17060-07-0	1,2-Dichloroethane-D4	99%		73-126%
2037-26-5	Toluene-D8	99%		86-112%
460-00-4	4-Bromofluorobenzene	102%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW02-N001	
<b>Lab Sample ID:</b> F24498-2	<b>Date Sampled:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 06/01/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	J008947.D	1	06/10/04	RA	n/a	n/a	VJ357
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.51	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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<b>Client Sample ID:</b> PIN20-RW02-N001		<b>Date Sampled:</b> 06/01/04
<b>Lab Sample ID:</b> F24498-2		<b>Date Received:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	4.7	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		86-115%
17060-07-0	1,2-Dichloroethane-D4	98%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	103%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	
<b>Lab Sample ID:</b> F24498-3	<b>Date Sampled:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 06/01/04
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	J008948.D	1	06/10/04	RA	n/a	n/a	VJ357
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	2.7	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-RW03-N001	<b>Date Sampled:</b> 06/01/04
<b>Lab Sample ID:</b> F24498-3	<b>Date Received:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	13.6	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
17060-07-0	1,2-Dichloroethane-D4	100%		73-126%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	103%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	
<b>Lab Sample ID:</b> F24498-4	<b>Date Sampled:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 06/01/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023837.D	1	06/03/04	KW	n/a	n/a	VC1027
Run #2	B022251.D	50	06/04/04	KW	n/a	n/a	VB965

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	1.5	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	2600 <sup>b</sup>	50	25	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	1.2	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.86	1.0	0.50	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001		<b>Date Sampled:</b> 06/01/04
<b>Lab Sample ID:</b> F24498-4		<b>Date Received:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	4.1	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	97%	86-115%
17060-07-0	1,2-Dichloroethane-D4	92%	88%	73-126%
2037-26-5	Toluene-D8	103%	102%	86-112%
460-00-4	4-Bromofluorobenzene	98%	107%	83-119%

- (a) Sample was treated with an anti-foaming agent.
- (b) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 06/01/04
<b>Lab Sample ID:</b> F24498-4	<b>Date Received:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	5280	300	48	ug/l	1	06/07/04	06/08/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3834

(2) Prep QC Batch: MP6754

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
B = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTI-N001	<b>Date Sampled:</b> 06/01/04
<b>Lab Sample ID:</b> F24498-4	<b>Date Received:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	734	4.0	mg/l	1	06/14/04	DM	SW846 6010B/SM 2340B

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24498-5	<b>Date Sampled:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 06/01/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	B022250.D	1	06/03/04	KW	n/a	n/a	VB965
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	1.0	1.0	ug/l	
67-66-3	Chloroform	12.6	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	1.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	1.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001		<b>Date Sampled:</b> 06/01/04
<b>Lab Sample ID:</b> F24498-5		<b>Date Received:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624		
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL		

**VOA Special List**

CAS No.	Compound	Result	RL	MDL	Units	Q
75-69-4	Trichlorofluoromethane	ND	1.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		86-115%
17060-07-0	1,2-Dichloroethane-D4	88%		73-126%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	109%		83-119%

(a) Sample was treated with an anti-foaming agent.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24498-5	<b>Date Sampled:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 06/01/04
<b>Method:</b> EPA 625 EPA 625	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021825.D	1	06/08/04	ME	06/07/04	OP10608	SL1172
Run #2							

Run #	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	27	16	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	2.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	2.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.4	2.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	2.2	ug/l	
51-28-5	2,4-Dinitrophenol	ND	27	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	5.4	ug/l	
95-48-7	2-Methylphenol	ND	5.4	2.2	ug/l	
	3&4-Methylphenol	ND	5.4	2.2	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	2.2	ug/l	
100-02-7	4-Nitrophenol	ND	27	11	ug/l	
87-86-5	Pentachlorophenol	ND	27	11	ug/l	
108-95-2	Phenol	ND	5.4	2.2	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	2.2	ug/l	
88-06-2	2,4,6-Trichlorophenol	18.6	5.4	2.2	ug/l	
83-32-9	Acenaphthene	ND	5.4	1.1	ug/l	
208-96-8	Acenaphthylene	ND	5.4	1.1	ug/l	
120-12-7	Anthracene	ND	5.4	1.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	1.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	1.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	1.1	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	2.2	ug/l	
100-51-6	Benzyl Alcohol	ND	5.4	1.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	11	3.3	ug/l	
86-74-8	Carbazole	ND	5.4	1.1	ug/l	
218-01-9	Chrysene	ND	5.4	1.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	2.2	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	PIN20-TRTE-N001	<b>Date Sampled:</b>	06/01/04
<b>Lab Sample ID:</b>	F24498-5	<b>Date Received:</b>	06/01/04
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	EPA 625 EPA 625		
<b>Project:</b>	STAR Center- 4.5 Acre Site, Largo, FL		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.4	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.4	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.4	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.4	2.2	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.4	2.2	ug/l	
91-94-1	3,3' -Dichlorobenzidine	ND	11	5.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	2.2	ug/l	
132-64-9	Dibenzofuran	ND	5.4	1.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	2.2	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	2.7	ug/l	
84-66-2	Diethyl phthalate	ND	5.4	2.2	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.4	2.7	ug/l	
206-44-0	Fluoranthene	ND	5.4	1.1	ug/l	
86-73-7	Fluorene	ND	5.4	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.4	2.2	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.4	2.2	ug/l	
67-72-1	Hexachloroethane	ND	5.4	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	2.2	ug/l	
78-59-1	Isophorone	ND	5.4	1.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.4	1.1	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	2.2	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	2.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	2.2	ug/l	
91-20-3	Naphthalene	ND	5.4	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.4	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	2.2	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.4	1.1	ug/l	
129-00-0	Pyrene	ND	5.4	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		19-90%
4165-62-2	Phenol-d5	34%		10-68%
118-79-6	2,4,6-Tribromophenol	88%		36-137%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	
<b>Lab Sample ID:</b> F24498-5	<b>Date Sampled:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 06/01/04
<b>Method:</b> EPA 625 EPA 625	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		49-119%
321-60-8	2-Fluorobiphenyl	81%		45-118%
1718-51-0	Terphenyl-d14	84%		46-135%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.5  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001 <b>Lab Sample ID:</b> F24498-5 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	<b>Date Sampled:</b> 06/01/04 <b>Date Received:</b> 06/01/04 <b>Percent Solids:</b> n/a
---	---

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	5380	300	48	ug/l	1	06/07/04	06/08/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3834

(2) Prep QC Batch: MP6754

RL = Reporting Limit  
 MDL = Method Detection Limit

U = Indicates a result < MDL  
 B = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> PIN20-TRTE-N001	<b>Date Sampled:</b> 06/01/04
<b>Lab Sample ID:</b> F24498-5	<b>Date Received:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> STAR Center- 4.5 Acre Site, Largo, FL	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	748	4.0	mg/l	1	06/14/04	DM	SW846 6010B/SM 2340B

RL = Reporting Limit

## Misc. Forms

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### Custody Documents and Other Forms

---

Includes the following where applicable:

- Chain of Custody



# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-8700 • FAX: 407-425-0707

ACCUTEST JOB #:

ACCUTEST QUOTE #:

**F24498**

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION										MATRIX CODES	
NAME: <u>S.M. Stoller</u> ADDRESS: <u>7887 Bryan Dairy Rd., Suite 260</u> CITY: <u>Largo</u> STATE: <u>FL</u> ZIP: <u>33777</u>		PROJECT NAME: <u>STAR Center - 4.5 Acre startup</u> LOCATION: <u>Largo, FL</u> PROJECT NO.: <u>110406202</u> FAX #: _____				VOG-8260 VOG-624 SVOG-625 Fe + Hardness										DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID	
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			MATRIX	LPC	BOTTLE	PRESERVATION						LAB USE ONLY			
		DATE	TIME	SAMPLED BY:				NOI	NOI2	NOI3	NOI4	NOI5	NOI6				
1	PIN20-RW01-N001	6-1-04	1101	JPC	GW	3	3										
2	PIN20-RW02-N001		1103			3	3										
3	PIN20-RW03-N001		1106			3	3										
4	PIN20-TRTE-N001		1108			4	3	1					3	1			
5	PIN20-TRTE-N001		1110			6	3	1	2				3	2	1		

DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		COMMENTS/REMARKS
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER _____	APPROVED BY: _____	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____		<u>First monthly sampling event</u>

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY**

RELINQUISHED BY: <u>Chap. Cox</u>	DATE TIME: <u>6-1-04</u>	RECEIVED BY: <u>Chap. Cox</u>	DATE TIME: <u>6/1/04</u>	RELINQUISHED BY: <u>Chap. Cox</u>	DATE TIME: <u>6/1/04</u>	RECEIVED BY: <u>Jeff Mischak</u>
RELINQUISHED BY: _____	DATE TIME: _____	RECEIVED BY: _____	DATE TIME: _____	RELINQUISHED BY: _____	DATE TIME: _____	RECEIVED BY: _____
RELINQUISHED BY: _____	DATE TIME: _____	RECEIVED BY: _____	DATE TIME: _____	SEAL # _____	PRESERVE WHERE APPLICABLE <input type="checkbox"/>	ON ICE <input type="checkbox"/>
						TEMPERATURE <u>30°C</u>

F24498: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: **F24498**  
 Client: S.M. Stoller Project: STAR Center - 4.5 Acro Startup  
 Date Received: 6/1/04 Time Received: 17:20  
 # of Coolers Received: 1 Cooler Temperatures: 3.6°C  
 Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other  
 Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact ?	<u>Yes</u>	No
Chain of Custody Provided ?	<u>Yes</u>	No
COC Match Bottle Label ID's ?	<u>Yes</u>	No
Sample Labels Present on all bottles ?	<u>Yes</u>	No
All Analyses Marked On COC ?	<u>Yes</u>	No
Arc All Bottles Intact ?	<u>Yes</u>	No
Samples Preserved Correctly ?	<u>Yes</u>	No
Correct Number of Containers Used ?	<u>Yes</u>	No
Sufficient Sample Volume ?	<u>Yes</u>	No
Trip Blank Provided ?	Yes	<u>No</u>
Trip Blank on COC ?	Yes	<u>No</u>
Trip Blank Intact ?	Yes	No <u>N/A</u>
Trip Blank Matrix ?	Soil	Water <u>N/A</u>
Number of Encores ?	<u>0</u>	
Number of Soil Field Kits ?	<u>0</u>	

Summary of Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature: Jeff Mitchell Date: 6/1/04  
 Review Signature: \_\_\_\_\_

ASBD 12/30/03

4.1  
4

F24498: Chain of Custody  
 Page 2 of 2



07/19/04

Technical Report for

S M Stoller

Star Center-4.5 Acre Monthly /Effluent, FL

110406202

Accutest Job Number: F24499

Sampling Date: 06/01/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **8**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

S M Stoller

Job No: F24499

Star Center-4.5 Acre Monthly /Effluent, FL  
Project No: 110406202

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F24499-1	06/01/04	11:13 JPC	06/01/04	AQ	Ground Water	PIN20-TRTE-N001*4.5 ACRE

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F24499

**Site:** Star Center-4.5 Acre Monthly /Effluent, FL

**Report Date** 6/4/2004

1 Sample was collected on 06/01/2004 and were received at Accutest on 06/01/2004 properly preserved, at 3.6 Deg. C and intact. These Samples received an Accutest job number of F24499. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Volatiles by GCMS By Method EPA 624

**Matrix:** AQ

**Batch ID:** VC1027

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F24474-1MS, F24474-1MSD were used as the QC samples indicated.

F24499-1(PIN20-TRTE-N001\*4.5 ACRE): Sample was treated with an anti-foaming agent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: June 04, 2004

\_\_\_\_\_  
Sue O. Bell, Project Manager

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN20-TRTE-N001*4.5 ACRE	
<b>Lab Sample ID:</b> F24499-1	<b>Date Sampled:</b> 06/01/04
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 06/01/04
<b>Method:</b> EPA 624	<b>Percent Solids:</b> n/a
<b>Project:</b> Star Center-4.5 Acre Monthly /Effluent, FL	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	C0023839.D	1	06/03/04	KW	n/a	n/a	VC1027
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

### Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene <sup>b</sup>	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		86-115%
17060-07-0	1,2-Dichloroethane-D4	93%		73-126%
2037-26-5	Toluene-D8	103%		86-112%
460-00-4	4-Bromofluorobenzene	99%		83-119%

- (a) Sample collected on 06/01/04 at 11:13.  
 (b) Sample was treated with an anti-foaming agent.

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ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15  
ORLANDO, FL 32811  
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:  
ACCUTEST QUOTE #: **F24499**

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION										MATRIX CODES
NAME: <u>S.M. Staller</u> ADDRESS: <u>7887 Bryon Dairy Rd, Suite 260</u> CITY: <u>Largo</u> STATE: <u>FL</u> ZIP: <u>33777</u>		PROJECT NAME: <u>STAR Center - 4.5 Acre monthly effluent</u> LOCATION: <u>Largo, FL</u> PROJECT NO.: <u>110406202</u> Onsite contact: <u>Barry Rice</u> FAX #: <u>727-549-1121</u>				BTEX Total VOAs										DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			PRESERVATION							LAB USE ONLY				
		DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	IC	MSD	MSD	MSD	MSD		MSD			
1	PIN20-TRTE-NO01 * 4.5 Acre	6-1-04	1113	JPC	GW	3	3									

DATA TURNAROUND INFORMATION	DATA DELIVERABLE INFORMATION	COMMENTS/REMARKS
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY)	APPROVED BY: _____ Benzene _____ Xylene _____ Toluene _____ Total VOAs _____ Ethylbenzene _____

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY					
1. RELINQUISHED BY: <u>J.P. Coe</u>	DATE TIME: <u>6-1-04</u>	RECEIVED BY: <u>[Signature]</u>	RELINQUISHED BY: <u>[Signature]</u>	DATE TIME: <u>6/1/04 17:20</u>	RECEIVED BY: <u>[Signature]</u>
3.		3.	4.		4.
5.		5.	SEAL #	PRESERVE WHERE APPLICABLE	ON ICE
					TEMPERATURE <u>3.6° C</u>

F24499: Chain of Custody

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ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: **F24499**  
Client: S.M. Stoller Project: STAR Center - 4.5 ACE Monthly Eff.  
Date Received: 6/1/04 Time Received: 17:20  
# of Coolers Received: 1 Cooler Temperatures: 3-6°C  
Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other  
Air Bill Number: \_\_\_\_\_

Cooler Custody Seals Intact? Yes No  
Chain of Custody Provided? Yes No  
COC Match Bottle Label ID's? Yes No  
Sample Labels Present on all bottles? Yes No  
All Analyses Marked On COC? Yes No  
Are All Bottles Intact? Yes No  
Samples Preserved Correctly? Yes No  
Correct Number of Containers Used? Yes No  
Sufficient Sample Volume? Yes No  
Trip Blank Provided? Yes No  
Trip Blank on COC? Yes No  
Trip Blank Intact? Yes No N/A  
Trip Blank Matrix? Soil Water N/A  
Number of Encores? 0  
Number of Soil Field Kits? 0

Summary of Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: Jeff Minteroff Date: 6/1/04  
Review Signature: \_\_\_\_\_

ASBD 12/30/03

F24499: Chain of Custody  
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