



10/25/04

**Technical Report for**

**S M Stoller**

**Star Center-WWNA Monthly; Largo, FL**

**110406202**

**Accutest Job Number: F25982**

**Sampling Date: 08/10/04**

**Report to:**

**S M Stoller**

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

**ATTN: Cathy Kelleher**

**Total number of pages in report: 12**



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  
This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

# Table of Contents

-1-

<b>Section 1: Sample Summary .....</b>	<b>3</b>
<b>Section 2: Case Narrative/Conformance Summary .....</b>	<b>4</b>
<b>Section 3: Sample Results .....</b>	<b>5</b>
<b>3.1:</b> F25982-1: PIN18-RW02-N001 .....	5
<b>3.2:</b> F25982-2: PIN18-RW03-N001 .....	6
<b>3.3:</b> F25982-3: PIN18-RW0501-N001 .....	7
<b>3.4:</b> F25982-4: PIN18-EFF1-N001 .....	8
<b>3.5:</b> F25982-5: PIN18-EFF2-N001 .....	9
<b>Section 4: Misc. Forms .....</b>	<b>10</b>
<b>4.1:</b> Chain of Custody .....	11



## Sample Summary

S M Stoller

**Job No:** F25982

Star Center-WWNA Monthly; Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F25982-1	08/10/04	11:06 JPC	08/10/04	AQ	Ground Water	PIN18-RW02-N001
F25982-2	08/10/04	11:10 JPC	08/10/04	AQ	Ground Water	PIN18-RW03-N001
F25982-3	08/10/04	11:04 JPC	08/10/04	AQ	Ground Water	PIN18-RW0501-N001
F25982-4	08/10/04	11:03 JPC	08/10/04	AQ	Ground Water	PIN18-EFF1-N001
F25982-5	08/10/04	11:07 JPC	08/10/04	AQ	Ground Water	PIN18-EFF2-N001

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F25982

**Site:** Star Center-WWNA Monthly; Largo, FL

**Report Date** 8/27/2004

5 Samples were collected on 08/10/2004 and were received at Accutest on 08/10/2004 properly preserved, at 0.6 Deg. C and intact. These Samples received an Accutest job number of F25982. 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.

### Metals By Method SW846 6010B

**Matrix:** AQ

**Batch ID:** MP7018

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 F25979-1DUP, F25979-1MS, F25979-1MSD, F25979-1SDL 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: August 30, 2004

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

## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> PIN18-RW02-N001 <b>Lab Sample ID:</b> F25982-1 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> Star Center-WWNA Monthly; Largo, FL	<b>Date Sampled:</b> 08/10/04 <b>Date Received:</b> 08/10/04 <b>Percent Solids:</b> n/a
---	---

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	49.0	10	3.5	ug/l	1	08/21/04	08/24/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3944

(2) Prep QC Batch: MP7018

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> PIN18-RW03-N001	<b>Date Sampled:</b> 08/10/04
<b>Lab Sample ID:</b> F25982-2	<b>Date Received:</b> 08/10/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Star Center-WWNA Monthly; Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	47.9	10	3.5	ug/l	1	08/21/04	08/24/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3944

(2) Prep QC Batch: MP7018

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> PIN18-RW0501-N001 <b>Lab Sample ID:</b> F25982-3 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> Star Center-WWNA Monthly; Largo, FL	<b>Date Sampled:</b> 08/10/04 <b>Date Received:</b> 08/10/04 <b>Percent Solids:</b> n/a
---	---

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	158	10	3.5	ug/l	1	08/21/04	08/24/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3944

(2) Prep QC Batch: MP7018

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> PIN18-EFF1-N001	<b>Date Sampled:</b> 08/10/04
<b>Lab Sample ID:</b> F25982-4	<b>Date Received:</b> 08/10/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Star Center-WWNA Monthly; Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	33.9	10	3.5	ug/l	1	08/21/04	08/24/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3944

(2) Prep QC Batch: MP7018

RL = Reporting Limit  
MDL = Method Detection Limit

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

## Report of Analysis

3.5  
3

<b>Client Sample ID:</b> PIN18-EFF2-N001	<b>Date Sampled:</b> 08/10/04
<b>Lab Sample ID:</b> F25982-5	<b>Date Received:</b> 08/10/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Star Center-WWNA Monthly; Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.5 U	10	3.5	ug/l	1	08/21/04	08/24/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA3944

(2) Prep QC Batch: MP7018

RL = Reporting Limit  
MDL = Method Detection Limit

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

## Misc. Forms

---

### 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: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:  
ACCUTEST QUOTE #: **F25982**

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION								MATRIX CODES
S. M. Stoller NAME 7887 Bryan Dring Rd, Suite 260 ADDRESS Largo FL 33777 CITY STATE ZIP SEND REPORT TO: PHONE #		STAR Center - Monthly sampling PROJECT NAME WWA LOCATION 110406202 PROJECT NO. FAX #				<i>Assess</i>								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
		DATE	TIME	SAMPLED BY:		HC	NH3	HNO3	HNO2	H2SO4	NONE			
1	PINIF-RW02-N001	8-10-04	1106	JPC	GW	1								
2	PINIF-RW03-N001	↓	1110	↓	GW	1								
3	PINIF-RW0501-N001	↓	1104	↓	GW	1								
4	PINIF-EFF1-N001	↓	1103	↓	GW	1								
5	PINIF-EFF2-N001	↓	1107	↓	WW	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 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:	DATE TIME:	RECEIVED BY:	DATE TIME:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	DATE TIME:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	DATE TIME:	RECEIVED BY:		
1. <i>[Signature]</i>	8-10-04	1. <i>[Signature]</i>	8/10/04 14:35	2. <i>[Signature]</i>	8/10/04	17:40	2. <i>[Signature]</i>							
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	DATE TIME:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	DATE TIME:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	DATE TIME:	RECEIVED BY:		
3.		3.		4.		4.								
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	DATE TIME:	SEAL #	PRESERVE WHERE APPLICABLE	ON ICE	TEMPERATURE							
5.		5.			<input type="checkbox"/>	<input type="checkbox"/>	D.D. h.c.c							

4.1  
4

F25982: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F25982

Client: S.A. Stoller Project: STAR Center - Monthly Sampling

Date Received: 8/10/04 Time Received: 17:40

# of Coolers Received: 2 Cooler Temperatures: 0.0, 0.6°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 Miskoff Date: 8/10/04

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

ASBD/HW 05/11/03

4.1  
4

F25982: Chain of Custody  
Page 2 of 2



10/25/04

Technical Report for

S M Stoller

Star Center-WWNA Monthly; Largo, FL

110406202

Accutest Job Number: F26616

Sampling Date: 09/09/04

Report to:

S M Stoller

Cathy.Kelleher@gjo.doe.gov

ATTN: Cathy Kelleher

Total number of pages in report: **12**



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  
This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

# Table of Contents

-1-

<b>Section 1: Sample Summary .....</b>	<b>3</b>
<b>Section 2: Case Narrative/Conformance Summary .....</b>	<b>4</b>
<b>Section 3: Sample Results .....</b>	<b>5</b>
<b>3.1:</b> F26616-1: PIN18-RW02-N001 .....	5
<b>3.2:</b> F26616-2: PIN18-RW03-N001 .....	6
<b>3.3:</b> F26616-3: PIN18-RW0501-N001 .....	7
<b>3.4:</b> F26616-4: PIN18-EFF1-N001 .....	8
<b>3.5:</b> F26616-5: PIN18-EFF2-N001 .....	9
<b>Section 4: Misc. Forms .....</b>	<b>10</b>
<b>4.1:</b> Chain of Custody .....	11



## Sample Summary

S M Stoller

**Job No:** F26616

Star Center-WWNA Monthly; Largo, FL  
 Project No: 110406202

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F26616-1	09/09/04	10:57 JPC	09/09/04	AQ	Ground Water	PIN18-RW02-N001
F26616-2	09/09/04	10:55 JPC	09/09/04	AQ	Ground Water	PIN18-RW03-N001
F26616-3	09/09/04	10:59 JPC	09/09/04	AQ	Ground Water	PIN18-RW0501-N001
F26616-4	09/09/04	11:02 JPC	09/09/04	AQ	Ground Water	PIN18-EFF1-N001
F26616-5	09/09/04	11:05 JPC	09/09/04	AQ	Ground Water	PIN18-EFF2-N001

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F26616

**Site:** Star Center-WWNA Monthly; Largo, FL

**Report Date** 10/1/2004

5 Samples were collected on 09/09/2004 and were received at Accutest on 09/09/2004 properly preserved, at 3 Deg. C and intact. These Samples received an Accutest job number of F26616. 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.

### Metals By Method SW846 6010B

**Matrix:** AQ

**Batch ID:** MP7134

Samples F26511-1DUP, F26511-1MS, F26511-1MSD, F26511-1SDL were used as the QC samples for metals.

All method blanks for this batch meet method specific criteria.

RPD for Serial Dilution for Arsenic is outside control limits for sample MP7134-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

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: October 01, 2004

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

## Report of Analysis

<b>Client Sample ID:</b> PIN18-RW02-N001	<b>Date Sampled:</b> 09/09/04
<b>Lab Sample ID:</b> F26616-1	<b>Date Received:</b> 09/09/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Star Center-WWNA Monthly; Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	42.7	10	3.5	ug/l	1	09/20/04	09/30/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA4001

(2) Prep QC Batch: MP7134

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> PIN18-RW03-N001	<b>Date Sampled:</b> 09/09/04
<b>Lab Sample ID:</b> F26616-2	<b>Date Received:</b> 09/09/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Star Center-WWNA Monthly; Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	42.2	10	3.5	ug/l	1	09/20/04	09/30/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA4001

(2) Prep QC Batch: MP7134

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> PIN18-RW0501-N001	<b>Date Sampled:</b> 09/09/04
<b>Lab Sample ID:</b> F26616-3	<b>Date Received:</b> 09/09/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Star Center-WWNA Monthly; Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	199	10	3.5	ug/l	1	09/20/04	09/30/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA4001

(2) Prep QC Batch: MP7134

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> PIN18-EFF1-N001	<b>Date Sampled:</b> 09/09/04
<b>Lab Sample ID:</b> F26616-4	<b>Date Received:</b> 09/09/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Star Center-WWNA Monthly; Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	47.0	10	3.5	ug/l	1	09/20/04	09/30/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA4001

(2) Prep QC Batch: MP7134

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> PIN18-EFF2-N001	<b>Date Sampled:</b> 09/09/04
<b>Lab Sample ID:</b> F26616-5	<b>Date Received:</b> 09/09/04
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Star Center-WWNA Monthly; Largo, FL	

### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.5 U	10	3.5	ug/l	1	09/20/04	09/30/04 DM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA4001

(2) Prep QC Batch: MP7134

RL = Reporting Limit  
MDL = Method Detection Limit

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

## Misc. Forms

---

### Custody Documents and Other Forms

---

Includes the following where applicable:

- Chain of Custody



ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

**F26616**

Accutest's Job Number:

Client: SM Stoller

Project: Star Center - Monthly

Date Received: 9/19/24

Time Received: 17:30

# of Coolers Received: 1 Cooler Temperature: 3.0

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 IDs ?

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

Trip Blank Matrix ?

Yes  No

Number of Encores ?

Yes  No

Number of Soil Field Kits ?

Yes  No

Summary of Comments:

0

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_ Date: 9/19/24

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