



12/27/04

**Technical Report for**

**S M Stoller**

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

**7030-226**

**Accutest Job Number: F28014**

**Sampling Date: 11/09/04**

**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  
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## Sample Summary

S M Stoller

**Job No:** F28014

Star Center-WWNA Monthly; Largo, FL  
 Project No: 7030-226

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F28014-1	11/09/04	10:07 JPC	11/09/04	AQ	Ground Water	PIN18-RW02-N001
F28014-2	11/09/04	10:05 JPC	11/09/04	AQ	Ground Water	PIN18-RW03-N001
F28014-3	11/09/04	10:10 JPC	11/09/04	AQ	Ground Water	PIN18-RW0501-N001
F28014-4	11/09/04	10:13 JPC	11/09/04	AQ	Ground Water	PIN18-EFF1-N001
F28014-5	11/09/04	10:16 JPC	11/09/04	AQ	Ground Water	PIN18-EFF2-N001

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F28014

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

**Report Date** 11/16/2004

5 Samples were collected on 11/09/2004 and were received at Accutest on 11/09/2004 properly preserved, at 0.4 Deg. C and intact. These Samples received an Accutest job number of F28014. 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:** MP7396

Samples F27990-2MS, F27990-2MSD, F27990-2SDL, F27990-2DUP 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 MP7396-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

RPD for Duplicate for Arsenic is outside control limits for sample MP7396-D1. RPD acceptable due to low duplicate and sample concentrations.

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: November 17, 2004

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

## Report of Analysis

<b>Client Sample ID:</b> PIN18-RW02-N001	<b>Date Sampled:</b> 11/09/04
<b>Lab Sample ID:</b> F28014-1	<b>Date Received:</b> 11/09/04
<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	38.2	10	3.5	ug/l	1	11/11/04	11/12/04 SM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA4083

(2) Prep QC Batch: MP7396

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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<b>Client Sample ID:</b> PIN18-RW03-N001 <b>Lab Sample ID:</b> F28014-2 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> Star Center-WWNA Monthly; Largo, FL	<b>Date Sampled:</b> 11/09/04 <b>Date Received:</b> 11/09/04 <b>Percent Solids:</b> n/a
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### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	38.5	10	3.5	ug/l	1	11/11/04	11/12/04 SM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA4083

(2) Prep QC Batch: MP7396

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> 11/09/04
<b>Lab Sample ID:</b> F28014-3	<b>Date Received:</b> 11/09/04
<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	137	10	3.5	ug/l	1	11/11/04	11/12/04 SM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA4083

(2) Prep QC Batch: MP7396

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>	11/09/04
<b>Lab Sample ID:</b>	F28014-4		<b>Date Received:</b>	11/09/04
<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	36.0	10	3.5	ug/l	1	11/11/04	11/12/04 SM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA4083

(2) Prep QC Batch: MP7396

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> 11/09/04
<b>Lab Sample ID:</b> F28014-5		<b>Date Received:</b> 11/09/04
<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	11/11/04	11/12/04 SM	SW846 6010B <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA4083

(2) Prep QC Batch: MP7396

RL = Reporting Limit  
MDL = Method Detection Limit

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

## 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 #: **F28014**  
ACCUTEST QUOTE #:

CLIENT INFORMATION			FACILITY INFORMATION				ANALYTICAL INFORMATION										MATRIX CODES
S.M. Stoller NAME 7887 Bryan Dairy Rd, Suite 260 ADDRESS Largo FL 33777 CITY STATE ZIP SEND REPORT TO: PHONE #			STAR Center - Monthly sampling PROJECT NAME WWNA LOCATION 7030-226 PROJECT NO. FAX #				Arsenic										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	NO <sub>2</sub>	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NONE						
1	PIN18-RW02-N001	11-20-04	1007	JPC	GW	1											
2	PIN18-RW03-N001		1005			1											
3	PIN18-RW0501-N001		1010			1											
4	PIN18-EFF1-N001		1013			1											
5	PIN18-EFF2-N001		1016		WW	1											
DATA TURNAROUND INFORMATION <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			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										
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																	
RELINQUISHED BY SAMPLER: 1. J.P. Carr		DATE TIME: 11-20-04		RECEIVED BY: 1. [Signature] 11/20/04		RELINQUISHED BY: 2. [Signature] 11/20/04		DATE TIME: 11/20/04		RECEIVED BY: 2. [Signature] 11/20/04		SEAL # _____ PRESERVE WHERE APPLICABLE <input type="checkbox"/> ON ICE <input type="checkbox"/> TEMPERATURE 64 C					
RELINQUISHED BY: 3.		DATE TIME: 3.		RECEIVED BY: 3.		RELINQUISHED BY: 4.		DATE TIME: 4.		RECEIVED BY: 4.							
RELINQUISHED BY: 5.		DATE TIME: 5.		RECEIVED BY: 5.		RELINQUISHED BY: 6.		DATE TIME: 6.		RECEIVED BY: 6.							

4.1 4

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

F28014

Accutest's Job Number:

Client: S.M. Stoller Project: Star Center

Date Received: 11/19/04 Time Received: 15:55

# of Coolers Received: 1 Cooler Temperatures: 0.4

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

Trip Blank Matrix?  Yes  No

Number of Encores?  Yes  No

Number of Soil Field Kits?  Yes  No

Summary of Comments:

Signature: [Signature] Date: 11/19/04

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



12/27/04

Technical Report for

S M Stoller

Star Center-WWNA Monthly; Largo, FL

7030-226

Accutest Job Number: F28656

Sampling Date: 12/07/04

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  
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<b>4.1:</b> Chain of Custody .....	11



## Sample Summary

S M Stoller

**Job No:** F28656

Star Center-WWNA Monthly; Largo, FL  
 Project No: 7030-226

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F28656-1	12/07/04	10:02 JPC	12/08/04	AQ	Ground Water	PIN18-RW02-N001
F28656-2	12/07/04	09:59 JPC	12/08/04	AQ	Ground Water	PIN18-RW03-N001
F28656-3	12/07/04	10:04 JPC	12/08/04	AQ	Ground Water	PIN18-RW0501-N001
F28656-4	12/07/04	10:08 JPC	12/08/04	AQ	Ground Water	PIN18-EFF1-N001
F28656-5	12/07/04	10:11 JPC	12/08/04	AQ	Ground Water	PIN18-EFF2-N001

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** S M Stoller

**Job No:** F28656

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

**Report Date** 12/15/2004

5 Samples were collected on 12/07/2004 and were received at Accutest on 12/08/2004 properly preserved, at 3.2 Deg. C and intact. These Samples received an Accutest job number of F28656. 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:** MP7509

Samples F28656-1MS, F28656-1MSD, F28656-1SDL, F28656-1DUP were used as the QC samples for metals.

All method blanks for this batch meet method specific criteria.

RPD for Serial Dilution for Arsenic are outside control limits for sample MP7509-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

RPD for Duplicate for Arsenic are outside control limits for sample MP7509-D1. RPD acceptable due to low duplicate and sample concentrations.

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: December 15, 2004

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

## Report of Analysis

<b>Client Sample ID:</b> PIN18-RW02-N001	<b>Date Sampled:</b> 12/07/04
<b>Lab Sample ID:</b> F28656-1	<b>Date Received:</b> 12/08/04
<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	46.0	10	3.5	ug/l	1	12/13/04	12/13/04 SM	SW846 6010B <sup>1</sup>	SW846 3020A <sup>2</sup>

(1) Instrument QC Batch: MA4137

(2) Prep QC Batch: MP7509

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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<b>Client Sample ID:</b> PIN18-RW03-N001 <b>Lab Sample ID:</b> F28656-2 <b>Matrix:</b> AQ - Ground Water <b>Project:</b> Star Center-WWNA Monthly; Largo, FL	<b>Date Sampled:</b> 12/07/04 <b>Date Received:</b> 12/08/04 <b>Percent Solids:</b> n/a
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### Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	34.1	10	3.5	ug/l	1	12/13/04	12/13/04 SM	SW846 6010B <sup>1</sup>	SW846 3020A <sup>2</sup>

(1) Instrument QC Batch: MA4137

(2) Prep QC Batch: MP7509

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> 12/07/04
<b>Lab Sample ID:</b> F28656-3	<b>Date Received:</b> 12/08/04
<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	99.7	10	3.5	ug/l	1	12/13/04	12/13/04 SM	SW846 6010B <sup>1</sup>	SW846 3020A <sup>2</sup>

(1) Instrument QC Batch: MA4137

(2) Prep QC Batch: MP7509

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> 12/07/04
<b>Lab Sample ID:</b> F28656-4	<b>Date Received:</b> 12/08/04
<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	36.0	10	3.5	ug/l	1	12/13/04	12/13/04 SM	SW846 6010B <sup>1</sup>	SW846 3020A <sup>2</sup>

(1) Instrument QC Batch: MA4137

(2) Prep QC Batch: MP7509

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> 12/07/04
<b>Lab Sample ID:</b> F28656-5	<b>Date Received:</b> 12/08/04
<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	12/13/04	12/13/04 SM	SW846 6010B <sup>1</sup>	SW846 3020A <sup>2</sup>

(1) Instrument QC Batch: MA4137

(2) Prep QC Batch: MP7509

RL = Reporting Limit  
MDL = Method Detection Limit

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

## 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:

F28656

Client: S.M. Stoller

Project: State Center Monthly

Date Received: 12-8-04

Time Received: 18:00

# 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 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:

*[Handwritten Signature]*

Date:

12.8.04

Review Signature:

ASBD 12/30/03