



August 09, 2001

Scott Pierson  
Parsons Engineering Science, Inc.  
8000 Centre Park  
Suite 200  
Austin, Texas 78754  
TEL: (512) 719-6000  
FAX (512) 719-6099

RE: CSSA/Well 16

Order No.: 0108034

Dear Scott Pierson,

DHL Analytical received 4 samples on 8/8/01 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in black ink, appearing to read 'John DuPont', written over a horizontal line.

John DuPont  
QA Manager

CC:

DHL

# CHAIN OF CUSTODY RECORD

PARSONS ENGINEERING SCIENCE, INC.

8000 CENTRE PARK DRIVE SUITE 200

AUSTIN, TEXAS 78754

(512) 719-6000

Well #108034

Temp 6°C; 5.6

Temp Blank

PROJECT NAME/LOCATION CSSA/WELL 16				CARRIER <input checked="" type="checkbox"/> Federal Express <input type="checkbox"/> UPS				PRESERVATIVE												FIELD LOT CONTROL NUMBER	
PROJECT NUMBER PARSONS 7284187.03 7/23/01				AIRBILL OR CARRIER ID # 828422012791				ANALYSIS REQUIRED													
SAMPLER(S): Eric Tennyson <i>Eric Tennyson</i>																					
Date	Time	Sample ID/Desc.	Sample Type	Matrix	Sampling Method	Begin Depth	End Depth	NUMBER OF CONTAINERS												REMARKS	
8-7-01	0730	Well 16-8/7A	N	WG	WF			3	✓									24 TAT SEP			
"	0735	Well 16-GAC-1	N	WG	WF			3	✓												
"	0740	Well 16-GAC-2	N	WG	WF			3	✓												
"	0830	Well 16 TB-01	TB	WR				1	✓												
Questions? call Chris Beal 210-295-7417																					
Please FAX Preliminary results to 210-295-7356 ATTN: B. Murphy																					
Bill Parsons ES																					
Requested by <i>Eric Tennyson</i>						Requested by FX						Requested by									
Date 8-7-01						Date 8-7-01						Date									
Time 2030						Time 2030						Time									
Received by FX						Received by <i>[Signature]</i>						Received by									
Date 8-8-01						Date 8-8-01						Date									
Time 830						Time 830						Time									

White: laboratory returns with data; Yellow: laboratory copy; Pink: sampler copy.

FX 828422012791

# DHL Analytical

Date: 09-Aug-01

CLIENT: Parsons Engineering Science, Inc.  
Project Name: CSSA/Well 16  
Project No: 728487.03  
Lab Order: 0108034

Client Sample ID: Well 16-8/7A  
Lab ID: 0108034-01A  
Collection Date: 8/7/01 9:30:00 AM  
Matrix: AAQ

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	
<b>VOLATILES BY GC/MS</b>		<b>SW8260B</b>					<b>Analyst: DO</b>	
1,1-Dichloroethene	ND	0.2	1.00		µg/L	1	8/8/01 2:44:00 PM	
1,2-Dichloroethane	ND	0.4	1.00		µg/L	1	8/8/01 2:44:00 PM	
cis-1,2-Dichloroethene	176	0.2	1.00		µg/L	1	8/8/01 2:44:00 PM	
Tetrachloroethene	142	0.4	1.00		µg/L	1	8/8/01 2:44:00 PM	
trans-1,2-Dichloroethene	2.91	0.2	1.00		µg/L	1	8/8/01 2:44:00 PM	
Trichloroethene	185	0.4	1.00		µg/L	1	8/8/01 2:44:00 PM	
Vinyl chloride	ND	0.1	1.00		µg/L	1	8/8/01 2:44:00 PM	

Qualifiers: ND - Not Detected at the Method Detection Limit  
J - Analyte detected between the MDL and the RL  
B - Analyte detected in the associated Method Blank  
\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
C - Sample result or QC discussed in the Case Narrative  
E - Value above quantitation range

# DHL Analytical

Date: 09-Aug-01

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<b>CLIENT:</b> Parsons Engineering Science, Inc.	<b>Client Sample ID:</b> Well 16-GAC-1
<b>Project Name:</b> CSSA/Well 16	<b>Lab ID:</b> 0108034-02A
<b>Project No:</b> 728487.03	<b>Collection Date:</b> 8/7/01 9:35:00 AM
<b>Lab Order:</b> 0108034	<b>Matrix:</b> AAQ

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Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>VOLATILES BY GC/MS</b>		<b>SW8260B</b>					Analyst: DO
1,1-Dichloroethene	ND	0.2	1.00		µg/L	1	8/8/01 2:13:00 PM
1,2-Dichloroethane	ND	0.4	1.00		µg/L	1	8/8/01 2:13:00 PM
cis-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/8/01 2:13:00 PM
Tetrachloroethene	ND	0.4	1.00		µg/L	1	8/8/01 2:13:00 PM
trans-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/8/01 2:13:00 PM
Trichloroethene	ND	0.4	1.00		µg/L	1	8/8/01 2:13:00 PM
Vinyl chloride	ND	0.1	1.00		µg/L	1	8/8/01 2:13:00 PM

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<b>Qualifiers:</b>	ND - Not Detected at the Method Detection Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected between the MDL and the RL	C - Sample result or QC discussed in the Case Narrative
	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
	* - Value exceeds Maximum Contaminant Level	

**DHL Analytical**

Date: 09-Aug-01

CLIENT: Parsons Engineering Science, Inc.

Client Sample ID: Well 16-GAC-2

Project Name: CSSA Well 16

Lab ID: 0108034-03A

Project No: 728487.03

Collection Date: 8/7/01 9:40:00 AM

Lab Order: 0108034

Matrix: AAQ

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>VOLATILES BY GC/MS</b>		<b>SW8260B</b>					Analyst: DO
1,1-Dichloroethene	ND	0.2	1.00		µg/L	1	8/8/01 12:48:00 PM
1,2-Dichloroethane	ND	0.4	1.00		µg/L	1	8/8/01 12:48:00 PM
cis-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/8/01 12:48:00 PM
Tetrachloroethene	ND	0.4	1.00		µg/L	1	8/8/01 12:48:00 PM
trans-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/8/01 12:48:00 PM
Trichloroethene	ND	0.4	1.00		µg/L	1	8/8/01 12:48:00 PM
Vinyl chloride	ND	0.1	1.00		µg/L	1	8/8/01 12:48:00 PM

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between the MDL and the RL  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 C - Sample result or QC discussed in the Case Narrative  
 E - Value above quantitation range

**DHL Analytical**

Date: 09-Aug-01

CLIENT: Parsons Engineering Science, Inc.  
 Project Name: CSSA Well 16  
 Project No: 728487.03  
 Lab Order: 0108034

Client Sample ID: Well 16 TB-01  
 Lab ID: 0108034-04A  
 Collection Date: 8/7/01 8:30:00 AM  
 Matrix: AAQ

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>VOLATILES BY GC/MS</b>		<b>SW8260B</b>		Analyst: DO			
1,1-Dichloroethene	ND	0.2	1.00		µg/L	1	8/8/01 12:18:00 PM
1,2-Dichloroethane	ND	0.4	1.00		µg/L	1	8/8/01 12:18:00 PM
cis-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/8/01 12:18:00 PM
Tetrachloroethene	ND	0.4	1.00		µg/L	1	8/8/01 12:18:00 PM
trans-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/8/01 12:18:00 PM
Trichloroethene	ND	0.4	1.00		µg/L	1	8/8/01 12:18:00 PM
Vinyl chloride	ND	0.1	1.00		µg/L	1	8/8/01 12:18:00 PM

**Qualifiers:** ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between the MDL and the RL  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 C - Sample result or QC discussed in the Case Narrative  
 E - Value above quantitation range

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CLIENT: Parsons Engineering Science, Inc.  
Project: CSSA/Well 16  
Lab Order: 0108034

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**CASE NARRATIVE**

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For Volatile analysis by method 8260B the matrix spike and matrix spike duplicate were slightly below control limits for 1,1-Dichloroethene. These are flagged accordingly in the enclosed QC summary report. The "S" flag denotes spike recovery was outside control limits. The LCS was within control limits for this compound. No further corrective actions were required and no sample results were adversely affected.

DHL Analytical

Sample Receipt Checklist

Client Name CSSA

Date and Time Receive

8/8/01

Work Order Number 0108034

Received by MKS

Checklist completed by

[Signature] 8-8-01  
Signature Date

Reviewed by

[Signature] 8/8/01  
Initials Date

Matrix:

Carrier name: FedEx Priority

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No
- Water - VOA vials have zero headspace? No VOA vials submitted  Yes  No
- Water - pH acceptable upon receipt? Yes  No  NotApplicable

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section be

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Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Corrective Action \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108034  
 Project: CSSA/Well 16

**QC SUMMARY REPORT**

Method Blank

Sample ID: MB-8570      Batch ID: 8570      Test Code: SW8260B      Units: µg/L  
 Run ID: GCMS1\_010808A      Analysis Date: 8/8/01 11:48:00 AM      Prep Date: 8/8/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	1								
1,2-Dichloroethane	ND	1								
cis-1,2-Dichloroethene	ND	1								
Tetrachloroethene	ND	1								
trans-1,2-Dichloroethene	ND	1								
Trichloroethene	ND	1								
Vinyl chloride	ND	1								

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108034  
 Project: CSSA/Well 16

**QC SUMMARY REPORT**  
 Sample Matrix Spike

Sample ID: 0108034-02A MS    Batch ID: 8570    Test Code: SW8260B    Units: µg/L  
 Run ID: GCMS1\_010808A    Analysis Date: 8/8/01 3:18:00 PM    Prep Date: 8/8/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	36.56	1	50	0	73.1	75	125			S
Trichloroethene	45.23	1	50	0	90.5	75	125			

Sample ID: 0108034-02A MSD    Batch ID: 8570    Test Code: SW8260B    Units: µg/L  
 Run ID: GCMS1\_010808A    Analysis Date: 8/8/01 3:49:00 PM    Prep Date: 8/8/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	35.55	1	50	0	71.1	75	125	2.8	20	S
Trichloroethene	43.83	1	50	0	87.7	75	125	3.14	20	

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank

CLIENT: Parsons Engineering Science. Inc.  
 Work Order: 0108034  
 Project: CSSA/Well 16

**QC SUMMARY REPORT**  
 Laboratory Control Spike - generic

Sample ID: LCS-8570      Batch ID: 8570      Test Code: SW8260B      Units: µg/L  
 Run ID: GCMS1\_010808A      Analysis Date: 8/8/01 10:18:00 AM      Prep Date: 8/8/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	59.91	1	50	0	120	75	125			
1,2-Dichloroethane	59.17	1	50	0	118	75	125			
cis-1,2-Dichloroethene	59.35	1	50	0	119	75	125			
Tetrachloroethene	49.09	1	50	0	98.2	75	125			
trans-1,2-Dichloroethene	56.27	1	50	0	113	75	125			
Trichloroethene	62.55	1	50	0	125	75	125			
Vinyl chloride	52.16	1	50	0	104	75	125			

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108034  
 Project: CSSA/Well 16  
 Test No: SW8260B

**QC SUMMARY REPORT  
 SURROGATE RECOVERIES**

Volatiles by GC/MS

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4
0108034-01A	96.0	86.1	114	104
0108034-02A	97.3	86.2	115	105
0108034-02A MS	95.8	87.1	114	104
0108034-02A MSD	95.7	87.1	115	105
0108034-03A	98.3	86.6	114	105
0108034-04A	96.6	87.7	113	105
LCS-8570	93.5	88.3	110	107
MB-8570	95.5	88.2	112	105

Acronym	Surrogate	QC Limits
BR4FBZ	= 4-Bromofluorobenzene	75-125
BZMED8	= Toluene-d8	75-125
DBFM	= Dibromofluoromethane	75-125
DCA12D4	= 1,2-Dichloroethane-d4	62-139

\* Surrogate recovery outside acceptance limits



August 10, 2001

Scott Pierson  
Parsons Engineering Science, Inc.  
8000 Centre Park  
Suite 200  
Austin, Texas 78754  
TEL: (512) 719-6000  
FAX (512) 719-6099

RE: CSSA Well 16

Order No.: 0108039

Dear Scott Pierson,

DHL Analytical received 4 samples on 8/9/01 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in cursive script, appearing to read 'John DuPont'.

John DuPont  
QA Manager

CC:

DHL

# CHAIN OF CUSTODY RECORD

PARSONS ENGINEERING SCIENCE, INC.

8000 CENTRE PARK DRIVE SUITE 200

AUSTIN, TEXAS 78754

(512) 719-6000 Fax: 512-719-6099

WAF010839

Temp 0.6 °C, 4.4 Temp Blank

SEALS INTACT

PROJECT NAME/LOCATION <b>CSSA WELL 16</b>				CARRIER <input checked="" type="checkbox"/> Federal Express <input type="checkbox"/> UPS Other _____				PRESERVATIVE				FIELD LOT CONTROL NUMBER	
PROJECT NUMBER <b>PARSONS # 728487.03 task 301</b>				AIRBILL OR CARRIER ID # <b>828422012780</b>				NUMBER OF CONTAINERS <b>1</b> VOC: _____				ANALYSIS REQUIRED Ambient Condition Blank Equipment Blank Trip Blank Cooler Letter	
SAMPLER(S): <b>Eric Tennyson</b> <i>(Signature)</i> <b>Indy Temp</b>													
Date	Time	Sample ID/Desc.	Sample Type	Matrix	Sampling Method	Begin Depth	End Depth						REMARKS
8-8-01	0900	Well 16 TB-02	TB	WR				1	✓	Hold for S. Pearson 8/8/01			Method as per contract
"	0930	Well 16-8/8A	N	WG	WF			3	✓				contract
"	0935	Well 16-GAC-1B	N	WG	WF			3	✓				VOC list as per contract.
"	0940	Well 16-GAC-2B	N	WG	WF			3	✓				contract.
		+ Temp Blank											Please fax preliminary results to: Scott Pearson 512-719-6099
Requested by <i>(Signature)</i> Eric Tennyson				Requested by <i>(Signature)</i> FX				Requested by				Requested by	
Date 8-8-01				Date				Date				Date	
Time 2030				Time				Time				Time	
Received by <i>(Signature)</i> FX				Received by <i>(Signature)</i> [Signature]				Received by				Received by	
Date				Date				Date				Date	
Time				Time				Time				Time	

White: laboratory returns with data; Yellow: laboratory copy; Pink: sampler copy.

**DHL Analytical**

Date: 10-Aug-01

**CLIENT:** Parsons Engineering Science, Inc.  
**Project Name:** CSSA Well 16  
**Project No:** 728487.03  
**Lab Order:** 0108039

**Client Sample ID:** Well 16-8/8A  
**Lab ID:** 0108039-02A  
**Collection Date:** 8/8/01 9:30:00 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>VOLATILES BY GC/MS</b>		<b>SW8260B</b>					<b>Analyst: DO</b>
1,1-Dichloroethene	ND	0.2	1.00		µg/L	1	8/9/01 1:54:00 PM
1,2-Dichloroethane	ND	0.4	1.00		µg/L	1	8/9/01 1:54:00 PM
cis-1,2-Dichloroethene	156	0.2	1.00		µg/L	1	8/9/01 1:54:00 PM
Tetrachloroethene	150	0.4	1.00		µg/L	1	8/9/01 1:54:00 PM
trans-1,2-Dichloroethene	2.54	0.2	1.00		µg/L	1	8/9/01 1:54:00 PM
Trichloroethene	164	0.4	1.00		µg/L	1	8/9/01 1:54:00 PM
Vinyl chloride	ND	0.1	1.00		µg/L	1	8/9/01 1:54:00 PM

**Qualifiers:**  
 ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between the MDL and the RL  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 C - Sample result or QC discussed in the Case Narrative  
 E - Value above quantitation range

**DHL Analytical**

Date: 10-Aug-01

<b>CLIENT:</b> Parsons Engineering Science, Inc.	<b>Client Sample ID:</b> Well 16-GAC-1B
<b>Project Name:</b> CSSA Well 16	<b>Lab ID:</b> 0108039-03A
<b>Project No:</b> 728487.03	<b>Collection Date:</b> 8/8/01 9:35:00 AM
<b>Lab Order:</b> 0108039	<b>Matrix:</b> AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>VOLATILES BY GC/MS</b>		<b>SW8260B</b>					Analyst: DO
1,1-Dichloroethene	ND	0.2	1.00		µg/L	1	8/9/01 1:24:00 PM
1,2-Dichloroethane	ND	0.4	1.00		µg/L	1	8/9/01 1:24:00 PM
cis-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/9/01 1:24:00 PM
Tetrachloroethene	ND	0.4	1.00		µg/L	1	8/9/01 1:24:00 PM
trans-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/9/01 1:24:00 PM
Trichloroethene	ND	0.4	1.00		µg/L	1	8/9/01 1:24:00 PM
Vinyl chloride	ND	0.1	1.00		µg/L	1	8/9/01 1:24:00 PM

<b>Qualifiers:</b>	ND - Not Detected at the Method Detection Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected between the MDL and the RL	C - Sample result or QC discussed in the Case Narrative
	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
	* - Value exceeds Maximum Contaminant Level	



# DHL Analytical

Date: 10-Aug-01

CLIENT: Parsons Engineering Science, Inc.

Client Sample ID: Well 16-GAC-2B

Project Name: CSSA Well 16

Lab ID: 0108039-04A

Project No: 728487.03

Collection Date: 8/8/01 9:40:00 AM

Lab Order: 0108039

Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>VOLATILES BY GC/MS</b>		<b>SW8260B</b>					Analyst: DO
1,1-Dichloroethene	ND	0.2	1.00		µg/L	1	8/9/01 12:54:00 PM
1,2-Dichloroethane	ND	0.4	1.00		µg/L	1	8/9/01 12:54:00 PM
cis-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/9/01 12:54:00 PM
Tetrachloroethene	ND	0.4	1.00		µg/L	1	8/9/01 12:54:00 PM
trans-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/9/01 12:54:00 PM
Trichloroethene	ND	0.4	1.00		µg/L	1	8/9/01 12:54:00 PM
Vinyl chloride	ND	0.1	1.00		µg/L	1	8/9/01 12:54:00 PM

**Qualifiers:** ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between the MDL and the RL  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 C - Sample result or QC discussed in the Case Narrative  
 E - Value above quantitation range

**DHL Analytical**

Date: 10-Aug-01

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**CLIENT:** Parsons Engineering Science, Inc.  
**Project:** CSSA Well 16  
**Lab Order:** 0108039

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**CASE NARRATIVE**

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

DHL Analytical

Sample Receipt Checklist

Client Name PARSON

Date and Time Receive

8/9/01

Work Order Number 0108039

Received by MKS

Checklist completed by

[Signature] 8/9/01  
Signature Date

Reviewed by

(JD) 8/9/01  
Initials Date

Matrix:

Carrier name: FedEx Priority

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No
- Water - VOA vials have zero headspace? No VOA vials submitted  Yes  No
- Water - pH acceptable upon receipt? Yes  No  NotApplicable

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section be

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108039  
 Project: CSSA Well 16

**QC SUMMARY REPORT**  
 Method Blank

Sample ID: MB-8582      Batch ID: 8582      Test Code: SW8260B      Units: µg/L  
 Run ID: GCMS1\_010809A      Analysis Date: 8/9/01 12:23:00 PM      Prep Date: 8/9/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	1								
1,2-Dichloroethane	ND	1								
cis-1,2-Dichloroethene	ND	1								
Tetrachloroethene	ND	1								
trans-1,2-Dichloroethene	ND	1								
Trichloroethene	ND	1								
Vinyl chloride	ND	1								

**Qualifiers:** ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108039  
 Project: CSSA Well 16

**QC SUMMARY REPORT**  
 Sample Matrix Spike

Sample ID: 0108039-04A MS    Batch ID: 8582    Test Code: SW8260B    Units: µg/L  
 Run ID: GCMS1\_010809A    Analysis Date: 8/9/01 2:29:00 PM    Prep Date: 8/9/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	55.38	1	50	0	111	75	125			
Trichloroethene	50.24	2	50	0	100	75	125			

Sample ID: 0108039-04A MSD    Batch ID: 8582    Test Code: SW8260B    Units: µg/L  
 Run ID: GCMS1\_010809A    Analysis Date: 8/9/01 2:59:00 PM    Prep Date: 8/9/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	53.48	1	50	0	107	75	125	3.49	20	
Trichloroethene	48.72	2	50	0	97.4	75	125	3.07	20	

**Qualifiers:** ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108039  
 Project: CSSA Well 16

**QC SUMMARY REPORT**  
 Laboratory Control Spike - generic

Sample ID: LCS-8582      Batch ID: 8582      Test Code: SW8260B      Units: µg/L  
 Run ID: GCMS1\_010809A      Analysis Date: 8/9/01 10:52:00 AM      Prep Date: 8/9/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	53.14	1	50	0	106	75	125			
1,2-Dichloroethane	52.13	1	50	0	104	75	125			
cis-1,2-Dichloroethene	52.71	1	50	0	105	75	125			
Tetrachloroethene	49.73	1	50	0	99.5	75	125			
trans-1,2-Dichloroethene	49.62	1	50	0	99.2	75	125			
Trichloroethene	54.7	1	50	0	109	75	125			
Vinyl chloride	47.72	1	50	0	95.4	75	125			

**Qualifiers:** ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108039  
 Project: CSSA Well 16  
 Test No: SW8260B

**QC SUMMARY REPORT  
 SURROGATE RECOVERIES**

Volatiles by GC/MS

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4
0108039-02A	94.8	95.5	109	103
0108039-03A	97.1	94.4	110	103
0108039-04A	98.2	94.4	110	103
LCS-8582	95.3	94.9	106	104
MB-8582	99.1	95.9	108	104

Acronym	Surrogate	QC Limits
BR4FBZ	= 4-Bromofluorobenzene	75-125
BZMED8	= Toluene-d8	75-125
DBFM	= Dibromofluoromethane	75-125
DCA12D4	= 1,2-Dichloroethane-d4	62-139

\* Surrogate recovery outside acceptance limits

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108039  
 Project: CSSA Well 16

**QC SUMMARY REPORT**  
 Initial Calibration Verification Standard

Sample ID: ICV-010809      Batch ID: R8924      Test Code: SW8260B      Units: µg/L  
 Run ID: GCMS1\_010809A      Analysis Date: 8/9/01 10:15:00 AM      Prep Date:

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	44.56	1	50	0	89.1	75	125			
1,2-Dichloroethane	51.67	1	50	0	103	75	125			
cis-1,2-Dichloroethene	49.61	1	50	0	99.2	75	125			
Tetrachloroethene	48.87	2	50	0	97.7	75	125			
trans-1,2-Dichloroethene	47.07	1	50	0	94.1	75	125			
Trichloroethene	53.72	2	50	0	107	75	125			
Vinyl chloride	48.96	1	50	0	97.9	75	125			

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank





August 13, 2001

Scott Pierson  
Parsons Engineering Science, Inc.  
8000 Centre Park  
Suite 200  
Austin, Texas 78754  
TEL: (512) 719-6000  
FAX (512) 719-6099

RE: CSSA Well 16

Order No.: 0108050

Dear Scott Pierson,

DHL Analytical received 4 samples on 8/10/01 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in cursive script, appearing to read 'John DuPont'.

John DuPont  
QA Manager

CC:

DHL

# CHAIN OF CUSTODY RECORD

PARSONS ENGINEERING SCIENCE, INC.

8000 CENTRE PARK DRIVE SUITE 200

AUSTIN, TEXAS 78754

(512) 719-6000

1716-0108000  
1.001 Initial Trip Blank  
3.1 4.1

PROJECT NAME/LOCATION <b>CSSA Well 16</b>			CARRIER <input checked="" type="checkbox"/> Federal Express <input type="checkbox"/> UPS					PRESERVATIVE										FIELD LOT CONTROL NUMBER								
PROJECT NUMBER <b>PARSONS # 728487.03</b> TASK 301			AIRBILL OR CARRIER ID # <b>828422012770</b>					ANALYSIS REQUIRED										REMARKS								
SAMPLER(S) <b>Eric Tennyson</b> <i>Eric Tennyson</i>															NUMBER OF CONTAINERS <b>HC1</b>		Ambient Condition Blank		Equipment Blank		Trip Blank		Cooler Letter		24 hr. TAT	
Date	Time	Sample ID/Desc.	Sample Type	Matrix	Sampling Method	Begin Depth	End Depth	VOCs																		
8-9-01	18:00	Well 16-TB	TB	WR	NA	NA	NA	1	✓									* Run TB only if hits in GAC 1 or 2.								
8-9-01	18:15	Well 16-8/9 A	N	WG	WF	NA	NA	3	✓									* Parameters as per contract								
8-9-01	18:17	Well 16-GAC-1C	N	WG	WF	NA	NA	3	✓																	
8-9-01	18:19	Well 16-GAC-2C	N	WG	WF	NA	NA	3	✓																	
		+ Temp Blanks																Please FAX preliminary results to Scott Pearson 512-719-6079								
Released by: <i>Eric Tennyson</i>			Date: 8-9-01			Time: 2:00 PM			Received by: Fed Ex			Date: 8-9-01			Time: 2:45			Released by:			Date:			Time:		
Received by: Fed Ex			Date: 8-10-01			Time: 8:30 AM			Received by: Jennifer Sky			Date: 8-10-01			Time: 8:30 AM			Received by:			Date:			Time:		

White: laboratory returns with data; Yellow: laboratory copy; Pink: sampler copy.

**DHL Analytical**

Date: 13-Aug-01

CLIENT: Parsons Engineering Science, Inc.  
 Project Name: CSSA Well 16  
 Project No: 728487.03  
 Lab Order: 0108050

Client Sample ID: Well 16-8/9A  
 Lab ID: 0108050-02A  
 Collection Date: 8/9/01 6:15:00 PM  
 Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>VOLATILES BY GC/MS</b>		<b>SW8260B</b>			Analyst: DO		
1,1-Dichloroethene	ND	0.2	1.00		µg/L	1	8/10/01 1:10:00 PM
1,2-Dichloroethane	ND	0.4	1.00		µg/L	1	8/10/01 1:10:00 PM
cis-1,2-Dichloroethene	158	0.2	1.00		µg/L	1	8/10/01 1:10:00 PM
Tetrachloroethene	145	0.4	1.00		µg/L	1	8/10/01 1:10:00 PM
trans-1,2-Dichloroethene	2.22	0.2	1.00		µg/L	1	8/10/01 1:10:00 PM
Trichloroethene	166	0.4	1.00		µg/L	1	8/10/01 1:10:00 PM
Vinyl chloride	ND	0.1	1.00		µg/L	1	8/10/01 1:10:00 PM

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between the MDL and the RL  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 C - Sample result or QC discussed in the Case Narrative  
 E - Value above quantitation range

**DHL Analytical**

Date: 13-Aug-01

<b>CLIENT:</b> Parsons Engineering Science, Inc.	<b>Client Sample ID:</b> Well 16-GAC-1C
<b>Project Name:</b> CSSA Well 16	<b>Lab ID:</b> 0108050-03A
<b>Project No:</b> 728487.03	<b>Collection Date:</b> 8/9/01 6:17:00 PM
<b>Lab Order:</b> 0108050	<b>Matrix:</b> AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>VOLATILES BY GC/MS</b>		<b>SW8260B</b>			Analyst: DO		
1,1-Dichloroethene	ND	0.2	1.00		µg/L	1	8/10/01 12:40:00 PM
1,2-Dichloroethane	ND	0.4	1.00		µg/L	1	8/10/01 12:40:00 PM
cis-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/10/01 12:40:00 PM
Tetrachloroethene	ND	0.4	1.00		µg/L	1	8/10/01 12:40:00 PM
trans-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/10/01 12:40:00 PM
Trichloroethene	ND	0.4	1.00		µg/L	1	8/10/01 12:40:00 PM
Vinyl chloride	ND	0.1	1.00		µg/L	1	8/10/01 12:40:00 PM

<b>Qualifiers:</b>	ND - Not Detected at the Method Detection Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected between the MDL and the RL	C - Sample result or QC discussed in the Case Narrative
	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
	* - Value exceeds Maximum Contaminant Level	

# DHL Analytical

Date: 13-Aug-01

CLIENT: Parsons Engineering Science, Inc.  
 Project Name: CSSA Well 16  
 Project No: 728487.03  
 Lab Order: 0108050

Client Sample ID: Well 16-GAC-2C  
 Lab ID: 0108050-04A  
 Collection Date: 8/9/01 6:19:00 PM  
 Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>VOLATILES BY GC/MS</b>		<b>SW8260B</b>				Analyst: DO	
1,1-Dichloroethene	ND	0.2	1.00		µg/L	1	8/10/01 12:10:00 PM
1,2-Dichloroethane	ND	0.4	1.00		µg/L	1	8/10/01 12:10:00 PM
cis-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/10/01 12:10:00 PM
Tetrachloroethene	ND	0.4	1.00		µg/L	1	8/10/01 12:10:00 PM
trans-1,2-Dichloroethene	ND	0.2	1.00		µg/L	1	8/10/01 12:10:00 PM
Trichloroethene	ND	0.4	1.00		µg/L	1	8/10/01 12:10:00 PM
Vinyl chloride	ND	0.1	1.00		µg/L	1	8/10/01 12:10:00 PM

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between the MDL and the RL  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 C - Sample result or QC discussed in the Case Narrative  
 E - Value above quantitation range

**DHL Analytical**

Date: 13-Aug-01

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CLIENT: Parsons Engineering Science, Inc.  
Project: CSSA Well 16  
Lab Order: 0108050

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**CASE NARRATIVE**

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

Sample Receipt Checklist

Client Name PARSON

Date and Time Receive

8/10/01

Work Order Number 0108050

Received by JLS

Checklist completed by

[Signature] 8/10/01  
Signature Date

Reviewed by

[Initials] [Date]  
Initials Date

Matrix:

Carrier name: FedEx Priority

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No
- Water - VOA vials have zero headspace? No VOA vials submitted  Yes  No
- Water - pH acceptable upon receipt? Yes  No  NotApplicable

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section be

-----

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

Corrective Action \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108050  
 Project: CSSA Weil 16

**QC SUMMARY REPORT**  
 Method Blank

Sample ID: MB-8592      Batch ID: 8592      Test Code: SW8260B      Units: µg/L  
 Run ID: GCMS1\_010810A      Analysis Date: 8/10/01 11:40:00 AM      Prep Date: 8/10/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	1								
1,2-Dichloroethane	ND	1								
cis-1,2-Dichloroethene	ND	1								
Tetrachloroethene	ND	1								
trans-1,2-Dichloroethene	ND	1								
Trichloroethene	ND	1								
Vinyl chloride	ND	1								

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank



CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108050  
 Project: CSSA Well 16

**QC SUMMARY REPORT**  
 Sample Matrix Spike

Sample ID: 0108050-02A MS    Batch ID: 8592    Test Code: SW8260B    Units: µg/L  
 Run ID: GCMS1\_010810A    Analysis Date: 8/10/01 1:48:00 PM    Prep Date: 8/10/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	58.3	1	50	0	117	75	125			
Trichloroethene	212.7	2	50	166	93.5	75	125			

Sample ID: 0108050-02A MSD    Batch ID: 8592    Test Code: SW8260B    Units: µg/L  
 Run ID: GCMS1\_010810A    Analysis Date: 8/10/01 2:21:00 PM    Prep Date: 8/10/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	54.98	1	50	0	110	75	125	5.86	20	
Trichloroethene	207.8	2	50	166	83.7	75	125	2.34	20	

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108050  
 Project: CSSA Well 16

**QC SUMMARY REPORT**  
 Laboratory Control Spike - generic

Sample ID: LCS-8592      Batch ID: 8592      Test Code: SW8260B      Units: µg/L  
 Run ID: GCMS1\_010810A      Analysis Date: 8/10/01 10:10:00 AM      Prep Date: 8/10/01

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	54.29	1	50	0	109	75	125			
1,2-Dichloroethane	52.64	1	50	0	105	75	125			
cis-1,2-Dichloroethene	52.31	1	50	0	106	75	125			
Tetrachloroethene	52.44	2	50	0	105	75	125			
trans-1,2-Dichloroethene	50.7	1	50	0	101	75	125			
Trichloroethene	54.92	2	50	0	110	75	125			
Vinyl chloride	46.56	1	50	0	93.1	75	125			

**Qualifiers:** ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108050  
 Project: CSSA Well 16  
 Test No: SW8260B

QC SUMMARY REPORT  
 SURROGATE RECOVERIES

Volatiles by GC/MS

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4
0108050-02A	97.4	93.2	110	103
0108050-02A MS	96.1	93.8	110	104
0108050-02A MSD	96.9	94.3	110	103
0108050-03A	96.3	94.8	111	104
0108050-04A	98.2	94.5	110	105
LCS-8592	91.5	96.4	107	105
MB-8592	98.7	94.3	109	104

Acronym	Surrogate	QC Limits
BR4FBZ	= 4-Bromofluorobenzene	75-125
BZMED8	= Toluene-d8	75-125
DBFM	= Dibromofluoromethane	75-125
DCA12D4	= 1,2-Dichloroethane-d4	62-139

\* Surrogate recovery outside acceptance limits

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108050  
 Project: CSSA Well 16

**QC SUMMARY REPORT**  
 Initial Calibration Verification Standard

Sample ID: ICV-010810      Batch ID: R8941      Test Code: SW8260B      Units: µg/L  
 Run ID: GCMS1\_010810A      Analysis Date: 8/10/01 9:39:00 AM      Prep Date:

Analyte	Result	RL	SPK value	SPK Ref	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	52.36	1	50	0	105	75	125			
1,1,1-Trichloroethane	53.62	1	50	0	107	75	125			
1,1,2,2-Tetrachloroethane	43.24	1	50	0	86.5	75	125			
1,1,2-Trichloroethane	52.31	1	50	0	105	75	125			
1,1-Dichloroethane	47.36	1	50	0	94.7	75	125			
1,1-Dichloroethene	43.57	1	50	0	87.1	75	125			
1,1-Dichloropropene	50.57	1	50	0	101	75	125			
1,2,3-Trichlorobenzene	45.35	5	50	0	90.7	75	125			
1,2,3-Trichloropropane	43.68	1	50	0	87.4	75	125			
1,2,4-Trichlorobenzene	46.81	5	50	0	93.6	75	125			
1,2,4-Trimethylbenzene	46.88	5	50	0	93.8	75	125			
1,2-Dibromo-3-chloropropane	43.24	5	50	0	86.5	75	125			
1,2-Dibromoethane	48.81	1	50	0	97.6	75	125			
1,2-Dichlorobenzene	46.99	1	50	0	94	75	125			
1,2-Dichloroethane	52.13	1	50	0	104	75	125			
1,2-Dichloropropane	49.04	1	50	0	98.1	75	125			
1,3,5-Trimethylbenzene	47.11	5	50	0	94.2	75	125			
1,3-Dichlorobenzene	47.3	2	50	0	94.6	75	125			
1,3-Dichloropropane	47.8	1	50	0	95.6	75	125			
1,4-Dichlorobenzene	46.75	2	50	0	93.5	75	125			
2,2-Dichloropropane	53.26	1	50	0	107	75	125			
2-Butanone	40.78	25	50	0	81.6	60	140			
2-Chloroethylvinylether	50.06	25	50	0	100	60	140			
2-Chlorotoluene	45.06	5	50	0	90.1	75	125			
2-Hexanone	40.82	25	50	0	81.6	60	140			
4-Chlorotoluene	46.03	5	50	0	92.1	75	125			
4-Methyl-2-pentanone	40.83	25	50	0	81.7	60	140			
Acetone	46.41	100	50	0	92.8	60	140			
Benzene	48.55	1	50	0	97.1	75	125			
Bromobenzene	46.62	1	50	0	93.2	75	125			
Bromochloromethane	52.44	1	50	0	105	75	125			
Bromodichloromethane	52.36	1	50	0	106	75	125			
Bromoform	42.88	1	50	0	85.8	75	125			
Bromomethane	49.68	1	50	0	99.4	75	125			
Carbon disulfide	50.02	25	50	0	100	60	140			
Carbon tetrachloride	54.88	1	50	0	110	75	125			
Chlorobenzene	49.44	1	50	0	98.9	75	125			
Chloroethane	57.53	1	50	0	115	75	125			
Chloroform	52.42	1	50	0	105	75	125			
Chloromethane	40.88	1	50	0	81.8	75	125			
cis-1,2-Dichloroethene	49.92	1	50	0	99.8	75	125			

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank

CLIENT: Parsons Engineering Science, Inc.  
 Work Order: 0108050  
 Project: CSSA Well 16

**QC SUMMARY REPORT**  
 Initial Calibration Verification Standard

cis-1,3-Dichloropropene	51.59	1	50	0	103	75	125
Dibromochloromethane	46.21	1	50	0	92.4	75	125
Dibromomethane	51.07	1	50	0	102	75	125
Dichlorodifluoromethane	48.98	1	50	0	98	75	125
Ethylbenzene	49.2	2	50	0	98.4	75	125
Hexachlorobutadiene	45.67	2	50	0	91.3	75	125
Iodomethane	45.55	25	50	0	91.1	60	140
Isopropylbenzene	49.81	5	50	0	99.6	75	125
m,p-Xylene	99.45	5	100	0	99.4	75	125
Methyl tert-butyl ether	52.04	1	50	0	104	75	125
Methylene chloride	53.76	2.5	50	0	108	75	125
n-Butylbenzene	45.2	5	50	0	90.4	75	125
n-Propylbenzene	45.6	5	50	0	91.2	75	125
Naphthalene	38.69	5	50	0	77.4	75	125
o-Xylene	49.83	5	50	0	99.7	75	125
p-Isopropyltoluene	47.26	5	50	0	94.5	75	125
sec-Butylbenzene	45.94	5	50	0	91.9	75	125
Styrene	48.87	1	50	0	97.7	75	125
tert-Butylbenzene	47.4	5	50	0	94.8	75	125
Tetrachloroethene	50.77	2	50	0	102	75	125
Toluene	52.18	2	50	0	104	75	125
trans-1,2-Dichloroethene	46.84	1	50	0	93.7	75	125
trans-1,3-Dichloropropene	52.21	1	50	0	104	75	125
Trichloroethene	53.8	2	50	0	108	75	125
Trichlorofluoromethane	60.04	10	50	0	120	75	125
Vinyl chloride	46.91	1	50	0	93.8	75	125

Qualifiers: ND - Not Detected at the Method Detection Limit  
 J - Analyte detected between MDL and RL  
 S - Spike Recovery outside control limits

R - RPD outside control limits  
 B - Analyte detected in the associated Method Blank