CITRUS COUNTY CENTRAL LANDFILL

FIRST QUARTER 2008

DEP PERMIT NO. 21375-008-SO/01
DEP Due Date: April 15, 2008

Dept. of Environmental Protection

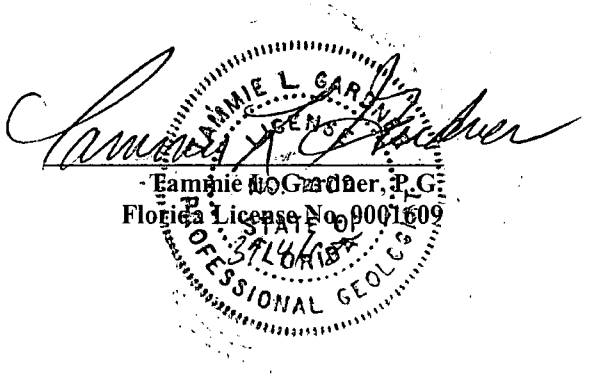
MAR 20 2008

Southwest District

Prepared by:

JONES EDMUNDS & ASSOCIATES, INC.
730 N.E. Waldo Road
Gainesville, Florida 32641-5699
Professional Engineering Certificate of Authorization # 1841
Professional Geology Certificate of Authorization #133

March 2008



Tammie L. Gardner, P.G.
Florida License No. 0001609

JONES EDMUNDS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 20 2008
SOUTHWEST DISTRICT
TAMPA

March 24, 2008

Mr. John Morris, P.G.
Florida Department of Environmental Protection - Southwest District
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

RE: Citrus County Landfill
Quarterly Leachate Sampling – First Quarter 2008
Permit No. 21375-008-SO/01
Jones Edmunds Project No. 03860-032-01

Dear Mr. Morris:

This report presents data from the First Quarter 2008 sampling of the Leachate Effluent at the Citrus County Landfill, performed on January 23, 2008 in conjunction with the First Semiannual 2008 groundwater sampling event. Results from the groundwater sampling event will be submitted under separate cover.

As required by the Permit, the leachate effluent was sampled and analyzed for the quarterly and semiannual parameters listed in Part E.9.b.2 (quarterly) of the Permit. Results from the sampling event are included in Attachment 2.

In addition, the leachate effluent was sampled and analyzed monthly as proposed in your e-mail dated July 9, 2007 and agreed to by the County for the parameters listed in Part E.9.b.2 (monthly). Laboratory analytical reports from the monthly sampling events (January, February, and March) are included in Attachment 1.

Reported leachate parameter concentrations were consistent with historical data and were within the compliance criteria set forth in the permit.

Monthly Operating Reports (January, February, and March) will be forwarded under separate cover.

If you have any questions regarding this report, please contact us at (352) 377-5821.

Sincerely,

Tammie L. Gardner

Tammie L. Gardner
Project Manager

M:\EnvDocs\Citrus County\2008\08Q1 leachate\08Q1_leachate letter.doc

xc: Susan Metcalfe, P.G.

Attachment 1: Monthly Leachate Effluent Analytical Results
Attachment 2: Quarterly Leachate Analytical Results
Attachment 3: Laboratory Data including Chain of Custody Forms
Attachment 4: Field Data

730 NE Waldo Rd
Gainesville, FL 32641

352.377.5821 Phone
352.377.3166 Fax
www.jonesedmunds.com

DER Form # 62-522.900 (2)
Form Title: GROUNDWATER MONITORING REPORT
Effective Date: _____
DER Application Date: _____

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

GROUNDWATER MONITORING REPORT

Rule 62-522.600 (11)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 20 2008
SOUTHWEST DISTRICT
TAMPA

Part I GENERAL INFORMATION

(1) Facility Name: Citrus County Central Landfill
Address: P.O. Box 340
City: Lecanto, Florida Zip: 34460-
Telephone Number:

(2) The WACS Identification Number: SWD/09/39859

(3) DER Permit Number: 21375-008-SO/01

(4) Authorized Representative Name: Susan Metcalfe, P.G., Director, Division of Solid Waste
Address: P.O. Box 340
City: Lecanto, Florida Zip: 34460-0340
Telephone Number: (352) 527-7671

(5) Type of Discharge: Landfill

(6) Method of Discharge: Groundwater

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Date: 3/14/08 Susan J Metcalfe

Signature of Owner or Authorized Representative

PART II QUALITY ASSURANCE REQUIREMENTS

Sample Organization CompQAP # DEP SOP 001/01

Analytical Lab CompQAP #/HRS Certification # E83182
CompQAP #/HRS Certification #

Lab Name: Environmental Conservation Laboratories, Inc.

Address: 10775 Central Point, Orlando, Florida 32824

Phone Number: (407) 826-5314

ATTACHMENT 1

MONTHLY LEACHATE EFFLUENT ANALYTICAL RESULTS

S.A.C. ENVIRONMENTAL LABORATORY INC
FLDOH CERTIFICATION #84492
ANALYTICAL REPORT

SOLID WASTE MANAGEMENT
PO BOX 340
LECANTO FL 34460

Invoice Number 9485

				Date/Time Sampled	1/2/08	0825 HRS
Sample Description	WWTP/EFF			***Date/Time Received***	1/2/08	1140 HRS
Method	**Analytes**	**Units**	**Results**	**% Removal MDL mg/L**	**Analyst**	**Analysis Date/Time**
SM5210-B	CBOD	mg/L	3.73	97.63% 1.4 mg/L	CK	1/3/08 0930 HRS
SM2540-D	TSS	mg/L	1.00	97.92% 1.0 mg/L	RAC	1/2/08 1430 HRS
SM4500-NO3-E	NITRATE	mg/L	2.20	0.10 mg/L	CK	1/3/08 0900 HRS

AMMONIA
SUB TO
ADVANCED ENVIRONMENTAL LABORATORIES
DHRS CERT IFICATION #E84589/E82574

Corrected Copy

Sally Ann Cassilo
Laboratory Manager

These results relate only to this sample.
For all Results qualified with an I, the PQL is defined to be 4 times the MDL

S.A.C. ENVIRONMENTAL LABORATORY INC
FLDOH CERTIFICATION #84492
ANALYTICAL REPORT

SOLID WASTE MANAGEMENT
PO BOX 340
LECANTO FL 34460

Invoice Number 9538

E08-080258 R15-08-2-1

Client	CITRUS COUNTY UTILITIES	***Sample Number***	E080258
Project	LANDFILL LEACHATE PLANT	***Date/Time Sampled***	2/6/08 0825 HRS
Sample Description	WWTP/EFF	***Date/Time Received***	2/6/08 0955 HRS

Method	Analytes	Units	Results	MDL mg/L	Analyst	Analysis Date/Time
SM5210-B	CBOD	mg/L	3.65	1.4 mg/L	SJL	2/6/08 1400 HRS
SM2540-D	TSS	mg/L	1.50	1.0 mg/L	RAC	2/8/08 0930 HRS
SM4500-NO3-E	NITRATE	mg/L	3.45	0.10 mg/L	CK	2/6/08 1000 HRS

RECEIVED
FEB 14 2008
CITRUS COUNTY - DIW
SOLID WASTE MANAGEMENT DIV.

Sally Ann Cesullo
Laboratory Manager

These results relate only to this sample.
For all results qualified with an I, the PQL is defined to be 4 times the MDL

S.A.C. ENVIRONMENTAL LABORATORY INC
FLDOH CERTIFICATION #84492
ANALYTICAL REPORT

SOLID WASTE MANAGEMENT
PO BOX 340
LECANTO FL 34460

Invoice Number 9597

Client	CITRUS COUNTY UTILITIES	***Sample Number***	E080480	
Project	LANDFILL LEACHATE PLANT	***Date/Time Sampled***	3/5/08	0830 HRS
Sample Description	WWTP/EFF	***Date/Time Received***	3/5/08	0915 HRS

Method	Analytes	Units	Results	MDL mg/L	Analyst	Analysis Date/Time
SM5210-B	CBOD	mg/L	2.58	1.4 mg/L	SL/CK	3/5/08 0935 HRS
SM2540-D	TSS	mg/L	2.00	1.0 mg/L	RAC	3/5/08 1300 HRS
SM4500-NO3-E	NITRATE	mg/L	0.65	0.10 mg/L	CK	3/6/08 0900 HRS

Sally Ann Carillo
Laboratory Manager

These results relate only to this sample.
For all results qualified with an I, the PQL is defined to be 4 times the MDL

ATTACHMENT 2

QUARTERLY LEACHATE ANALYTICAL RESULTS

Citrus County Central Landfill
Parameter Monitoring Report

PART III Analytical Results

Facility WACS #: SWD/09/39859

Test Site ID #: 175

Well Name: Leachate Effluent

Classification of Ground Water: GII

Ground Water Elevation (NGVD):

Sampling Date/Time: 1/23/2008 9:10:00 AM

Report Period: FIRST QUARTER 2008

Well Purged:

Well Type: [ ] Background
[ ] Intermediate
[ ] Compliance
[ ] Other
[ ] Detection

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED	ANALYSIS METHOD	ANALYSIS DATE/TIME	ANALYSIS RESULT *	UNITS	DETECTION LIMIT/UNITS
000094	CONDUCTIVITY (FIELD)	E	No	EPA 120.1	1/23/2008 9:10:00 AM	4220	µmhos/cm	
000400	pH (FIELD)	E	No	EPA 150.1	1/23/2008 9:10:00 AM	7.84	pH Units	
070300	TOTAL DISSOLVED SOLIDS	E	No	EPA 160.1	1/28/2008 9:52:00 PM	2500	mg/L	10mg/L
000010	TEMPERATURE (FIELD)	E	No	EPA 170.1	1/23/2008 9:10:00 AM	18.52	°C	
082078	TURBIDITY (FIELD)	E	No	EPA 180.1	1/23/2008 9:10:00 AM	4.57	NTU	
000940	CHLORIDE	E	No	EPA 300.0	1/24/2008 9:41:00 PM	1000	mg/L	0.25mg/L
000610	AMMONIA NITROGEN	E	No	EPA 350.1	1/30/2008 10:52:00 AM	1.8	mg/L	0.008mg/L
000299	DISSOLVED OXYGEN (FIELD)	E	No	EPA 360.1	1/23/2008 9:10:00 AM	2.64	mg/L	
000929	SODIUM	E	No	EPA 6020	1/30/2008 1:14:00 AM	634	mg/L	2.00mg/L
077651	1,2-DIBROMOETHANE (EDB)	E	No	EPA 8011	1/30/2008 2:17:00 PM	<0.010	µg/L	0.010µg/L
78124	BENZENE	E	No	EPA 8260B	1/27/2008 10:34:00 PM	<0.34	µg/L	0.34µg/L
032101	BROMODICHLOROMETHANE	E	No	EPA 8260B	1/27/2008 10:34:00 PM	<0.22	µg/L	0.22µg/L
032104	BROMOFORM	E	No	EPA 8260B	1/27/2008 10:34:00 PM	0.90 I	µg/L	0.33µg/L
032106	CHLOROFORM	E	No	EPA 8260B	1/27/2008 10:34:00 PM	6.1	µg/L	0.36µg/L
032105	DIBROMOCHLOROMETHANE	E	No	EPA 8260B	1/27/2008 10:34:00 PM	3.6	µg/L	0.23µg/L
034371	ETHYLBENZENE	E	No	EPA 8260B	1/27/2008 10:34:00 PM	<0.36	µg/L	0.36µg/L
034010	TOLUENE	E	No	EPA 8260B	1/27/2008 10:34:00 PM	<0.38	µg/L	0.38µg/L
82080	TOTAL TRIHALOMETHANES	E	No	EPA 8260B	1/27/2008 10:34:00 PM	10.6	µg/L	
039175	VINYL CHLORIDE	E	No	EPA 8260B	1/27/2008 10:34:00 PM	<0.91	µg/L	0.91µg/L
081551	XYLENES	E	No	EPA 8260B	1/27/2008 10:34:00 PM	<0.52	µg/L	0.52µg/L

* Attach Laboratory Reports

Citrus County Central Landfill
Parameter Monitoring Report

PART III Analytical Results

Facility WACS #: SWD/09/39859

Test Site ID #:

Well Name: EQUBLK (08S1CC-EQB1)

Classification of Ground Water:

Ground Water Elevation (NGVD):

Sampling Date/Time: 1/23/2008 8:55:00 AM

Report Period: FIRST QUARTER 2008

Well Purged:

Well Type: [ ] Background
[ ] Intermediate
[ ] Compliance
[ ] Other
[ ] Detection

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED	ANALYSIS METHOD	ANALYSIS DATE/TIME	ANALYSIS RESULT *	UNITS	DETECTION LIMIT/UNITS
070300	TOTAL DISSOLVED SOLIDS	E	No	EPA 160.1	1/28/2008 9:52:00 PM	<10	mg/L	10mg/L
000940	CHLORIDE	E	No	EPA 300.0	1/24/2008 8:42:00 PM	0.64 I	mg/L	0.05mg/L
000610	AMMONIA NITROGEN	E	No	EPA 350.1	1/30/2008 10:51:00 AM	<0.008	mg/L	0.008mg/L
000929	SODIUM	E	No	EPA 6020	1/29/2008 3:55:00 PM	<0.100	mg/L	0.100mg/L
077651	1,2-DIBROMOETHANE (EDB)	E	No	EPA 8011	1/30/2008 2:06:00 PM	<0.010	µg/L	0.010µg/L
034030	BENZENE	E	No	EPA 8260B	1/27/2008 10:03:00 PM	<0.34	µg/L	0.34µg/L
032101	BROMODICHLOROMETHANE	E	No	EPA 8260B	1/27/2008 10:03:00 PM	<0.22	µg/L	0.22µg/L
032104	BROMOFORM	E	No	EPA 8260B	1/27/2008 10:03:00 PM	<0.33	µg/L	0.33µg/L
032106	CHLOROFORM	E	No	EPA 8260B	1/27/2008 10:03:00 PM	<0.36	µg/L	0.36µg/L
032105	DIBROMOCHLOROMETHANE	E	No	EPA 8260B	1/27/2008 10:03:00 PM	<0.23	µg/L	0.23µg/L
034371	ETHYLBENZENE	E	No	EPA 8260B	1/27/2008 10:03:00 PM	<0.36	µg/L	0.36µg/L
034010	TOLUENE	E	No	EPA 8260B	1/27/2008 10:03:00 PM	<0.38	µg/L	0.38µg/L
82080	TOTAL TRIHALOMETHANES	E	No	EPA 8260B	1/27/2008 10:03:00 PM	<1.14	µg/L	
039175	VINYL CHLORIDE	E	No	EPA 8260B	1/27/2008 10:03:00 PM	<0.91	µg/L	0.91µg/L
081551	XYLENES	E	No	EPA 8260B	1/27/2008 10:03:00 PM	<0.52	µg/L	0.52µg/L

* Attach Laboratory Reports

Citrus County Central Landfill
Parameter Monitoring Report

PART III Analytical Results

Facility GMS #: SWD/09/39859

Test Site ID #:

Well Name: TRIP (08S1CC-TB3)

Classification of Ground Water:

Ground Water Elevation (NGVD):

Sampling Date/Time: 1/23/2008

Report Period: FIRST QUARTER 2008

Well Purged:

Well Type: [ ] Background
[ ] Intermediate
[ ] Compliance
[ ] Other
[ ] Detection

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED	ANALYSIS METHOD	ANALYSIS DATE/TIME	ANALYSIS RESULT *	UNITS	DETECTION LIMIT/UNITS
034030	BENZENE		No	EPA 8260B	1/27/2008 11:49:00 PM	<0.34	µg/L	0.34µg/L
032101	BROMODICHLOROMETHANE		No	EPA 8260B	1/27/2008 11:49:00 PM	<0.22	µg/L	0.22µg/L
032104	BROMOFORM		No	EPA 8260B	1/27/2008 11:49:00 PM	<0.33	µg/L	0.33µg/L
032106	CHLOROFORM		No	EPA 8260B	1/27/2008 11:49:00 PM	<0.36	µg/L	0.36µg/L
032105	DIBROMOCHLOROMETHANE		No	EPA 8260B	1/27/2008 11:49:00 PM	<0.23	µg/L	0.23µg/L
034371	ETHYLBENZENE		No	EPA 8260B	1/27/2008 11:49:00 PM	<0.36	µg/L	0.36µg/L
077128	STYRENE		No	EPA 8260B	1/27/2008 11:49:00 PM	<0.23	µg/L	0.23µg/L
034010	TOLUENE		No	EPA 8260B	1/27/2008 11:49:00 PM	<0.38	µg/L	0.38µg/L
82080	TOTAL TRIHALOMETHANES		No	EPA 8260B	1/27/2008 11:49:00 PM	<1.14	µg/L	
039175	VINYL CHLORIDE		No	EPA 8260B	1/27/2008 11:49:00 PM	<0.91	µg/L	0.91µg/L
081551	XYLENES		No	EPA 8260B	1/27/2008 11:49:00 PM	<0.52	µg/L	0.52µg/L

* Attach Laboratory Reports

ATTACHMENT 3

LABORATORY DATA
INCLUDING CHAIN OF CUSTODY FORMS

Environmental Conservation Laboratories, Inc.
10775 Central Port Drive
Orlando FL, 32824
Phone: 407.826.5314 FAX: 407.850.6945



www.encolabs.com

Thursday, March 13, 2008

Jones Edmunds & Associates, Inc. (JO006)

Attn: Elizabeth Kennelley

730 N.E.Waldo Road Bldg.A

Gainesville, FL 32641

RE: Project Number: 03860-032-01-1000, Project Name/Desc: Citrus County Landfill
ENCO Workorder: A800159

Dear Elizabeth Kennelley,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, January 24, 2008.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

This data has been produced in accordance with NELAC standards (June, 2003). This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

David M. Camacho

Project Manager

Enclosure(s)

www.encolabs.com

LAB #		A800159-02	A800159-03	A800159-08	-	-	-
MATRIX	Minimum	Ground Water	Ground Water	Ground Water	-	-	-
SAMPLE ID	Reporting Limit	Equip Blank #1::08S1CC-EQB1	Leachate Effluent::08S1CC-LEFF	Trip Blank #3::08S1CC-TB3	-	-	-
Volatile Organic Compounds by GCMS (Water)							
Vinyl chloride	1.0 ug/L	-	-	<0.91 [6]	-	-	-
Chloroform	1.0 ug/L	-	-	<0.36 [6]	-	-	-
Benzene	1.0 ug/L	-	-	<0.34 [6]	-	-	-
Bromodichloromethane	1.0 ug/L	-	-	<0.22 [6]	-	-	-
Toluene	1.0 ug/L	-	-	<0.38 [6]	-	-	-
Dibromochloromethane	1.0 ug/L	-	-	<0.23 [6]	-	-	-
Ethylbenzene	1.0 ug/L	-	-	<0.36 [6]	-	-	-
Bromoform	1.0 ug/L	-	-	<0.33 [6]	-	-	-
Xylenes (Total)	1.0 ug/L	-	-	<0.52 [6]	-	-	-
Dibromofluoromethane	141 [surr]	-	-	110%	-	-	-
Toluene-d8	134 [surr]	-	-	100%	-	-	-
4-Bromofluorobenzene	147 [surr]	-	-	90%	-	-	-
Vinyl chloride	1 ug/L	<0.91 [6]	<0.91 [6]	-	-	-	-
Chloroform	1 ug/L	<0.36 [6]	6.1	-	-	-	-
Benzene	1 ug/L	<0.34 [6]	<0.34 [6]	-	-	-	-
Bromodichloromethane	1 ug/L	<0.22 [6]	<0.22 [6]	-	-	-	-
Toluene	1 ug/L	<0.38 [6]	<0.38 [6]	-	-	-	-
Dibromochloromethane	1 ug/L	<0.23 [6]	3.6	-	-	-	-
Ethylbenzene	1 ug/L	<0.36 [6]	<0.36 [6]	-	-	-	-
Bromoform	1 ug/L	<0.33 [6]	0.90 [3]	-	-	-	-
Xylenes (Total)	1 ug/L	<0.52 [6]	<0.52 [6]	-	-	-	-
Dibromofluoromethane	141 [surr]	120%	120%	-	-	-	-
Toluene-d8	134 [surr]	95%	110%	-	-	-	-
4-Bromofluorobenzene	147 [surr]	120%	110%	-	-	-	-
Semivolatile Organic Compounds by GC (Water)							
1,2-Dibromoethane	0.020 ug/L	<0.010 [6]	<0.010 [6]	-	-	-	-
1,2-Dibromo-3-chloropropane	0.020 ug/L	<0.008 [6]	<0.008 [6]	-	-	-	-
1,3-Dichlorobenzene	150 [surr]	130%	130%	-	-	-	-
Metals by EPA 6000/7000 Series Methods (Water)							
Sodium	1.00 mg/L	<0.100 [6]	634 [2]	-	-	-	-
Classical Chemistry Parameters (Water)							
Ammonia as N	0.020 mg/L	<0.008 [6]	1.8	-	-	-	-
Chloride	5.0 mg/L	0.64 [1] [3] [4]	1000 [1] [2] [5]	-	-	-	-
Total Dissolved Solids	10 mg/L	<10 [6]	2500	-	-	-	-
Field Parameters (Water)							
Specific Conductance (EC)	0.00 umhos/cm	-	4220	-	-	-	-
Dissolved Oxygen	0.00 mg/L	-	2.64	-	-	-	-
pH	pH Units	-	7.84	-	-	-	-
Oxidation/Reduction Potential	mV	-	129.8	-	-	-	-
Temperature	0.00 °C	-	18.52	-	-	-	-
Turbidity	0.00 NTU	-	4.57	-	-	-	-

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes
Volatile Organic Compounds by GCMS - Quality Control										
Batch 8A27003 - EPA 5030B_MS										
Blank (8A27003-BLK1)				Prepared: 01/27/2008 11:51 Analyzed: 01/27/2008 12:49						
Vinyl chloride	0.91 U	1.0	ug/L							U
Chloroform	0.36 U	1.0	ug/L							U
Benzene	0.34 U	1.0	ug/L							U
Bromodichloromethane	0.22 U	1.0	ug/L							U
Toluene	0.38 U	1.0	ug/L							U
Dibromochloromethane	0.23 U	1.0	ug/L							U
Ethylbenzene	0.36 U	1.0	ug/L							U
Bromoform	0.33 U	1.0	ug/L							U
Xylenes (Total)	0.52 U	1.0	ug/L							U
Surrogate: Dibromofluoromethane	*64*		*ug/L*	*50.0*		*127*	*40-141*			
Surrogate: Toluene-d8	*57*		*ug/L*	*50.0*		*114*	*64-134*			
Surrogate: 4-Bromofluorobenzene	*55*		*ug/L*	*50.0*		*110*	*52-147*			
LCS (8A27003-BS1)				Prepared: 01/27/2008 11:51 Analyzed: 01/27/2008 12:18						
1,1-Dichloroethene	19	1.0	ug/L	20.0		94	57-142			
Benzene	19	1.0	ug/L	20.0		97	55-131			
Trichloroethene	16	1.0	ug/L	20.0		81	52-135			
Toluene	18	1.0	ug/L	20.0		91	58-148			
Chlorobenzene	18	1.0	ug/L	20.0		88	57-140			
Surrogate: Dibromofluoromethane	*61*		*ug/L*	*50.0*		*121*	*40-141*			
Surrogate: Toluene-d8	*50*		*ug/L*	*50.0*		*101*	*64-134*			
Surrogate: 4-Bromofluorobenzene	*47*		*ug/L*	*50.0*		*94*	*52-147*			
Matrix Spike (8A27003-MS1)		**Source: A707130-04**		Prepared: 01/27/2008 11:51 Analyzed: 01/27/2008 13:20						
1,1-Dichloroethene	17	1.0	ug/L	20.0	0.46 U	84	57-142			
Benzene	21	1.0	ug/L	20.0	0.34 U	107	55-131			
Trichloroethene	19	1.0	ug/L	20.0	0.55	93	52-135			
Toluene	19	1.0	ug/L	20.0	0.38 U	93	58-148			
Chlorobenzene	18	1.0	ug/L	20.0	0.27 U	90	57-140			
Surrogate: Dibromofluoromethane	*63*		*ug/L*	*50.0*		*126*	*40-141*			
Surrogate: Toluene-d8	*52*		*ug/L*	*50.0*		*105*	*64-134*			
Surrogate: 4-Bromofluorobenzene	*53*		*ug/L*	*50.0*		*106*	*52-147*			
Matrix Spike Dup (8A27003-MSD1)		**Source: A707130-04**		Prepared: 01/27/2008 11:51 Analyzed: 01/27/2008 13:50						
1,1-Dichloroethene	18	1.0	ug/L	20.0	0.46 U	91	57-142	7	16	
Benzene	23	1.0	ug/L	20.0	0.34 U	115	55-131	7	12	
Trichloroethene	19	1.0	ug/L	20.0	0.55	92	52-135	0.9	40	
Toluene	20	1.0	ug/L	20.0	0.38 U	100	58-148	7	21	
Chlorobenzene	19	1.0	ug/L	20.0	0.27 U	96	57-140	7	20	
Surrogate: Dibromofluoromethane	*61*		*ug/L*	*50.0*		*122*	*40-141*			
Surrogate: Toluene-d8	*43*		*ug/L*	*50.0*		*87*	*64-134*			
Surrogate: 4-Bromofluorobenzene	*49*		*ug/L*	*50.0*		*99*	*52-147*			
Batch 8A27004 - EPA 5030B_MS										
Blank (8A27004-BLK1)				Prepared: 01/27/2008 12:06 Analyzed: 01/27/2008 20:51						
Vinyl chloride	0.91 U	1.0	ug/L							U
Chloroform	0.36 U	1.0	ug/L							U

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes
Volatile Organic Compounds by GCMS - Quality Control										
Batch 8A27004 - EPA 5030B_MS										
Blank (8A27004-BLK1) Continued				Prepared: 01/27/2008 12:06 Analyzed: 01/27/2008 20:51						
Benzene	0.34 U	1.0	ug/L							U
Bromodichloromethane	0.22 U	1.0	ug/L							U
Toluene	0.38 U	1.0	ug/L							U
Dibromochloromethane	0.23 U	1.0	ug/L							U
Ethylbenzene	0.36 U	1.0	ug/L							U
Bromoform	0.33 U	1.0	ug/L							U
Xylenes (Total)	0.52 U	1.0	ug/L							U
Surrogate: Dibromofluoromethane	*53*		*ug/L*	*50.0*		*106*	*40-141*			
Surrogate: Toluene-d8	*49*		*ug/L*	*50.0*		*98*	*64-134*			
Surrogate: 4-Bromofluorobenzene	*46*		*ug/L*	*50.0*		*91*	*52-147*			
LCS (8A27004-BS1)				Prepared: 01/27/2008 12:06 Analyzed: 01/27/2008 20:22						
1,1-Dichloroethene	22	1.0	ug/L	20.0		109	57-142			
Benzene	24	1.0	ug/L	20.0		120	55-131			
Trichloroethene	20	1.0	ug/L	20.0		99	52-135			
Toluene	23	1.0	ug/L	20.0		115	58-148			
Chlorobenzene	22	1.0	ug/L	20.0		112	57-140			
Surrogate: Dibromofluoromethane	*51*		*ug/L*	*50.0*		*103*	*40-141*			
Surrogate: Toluene-d8	*49*		*ug/L*	*50.0*		*98*	*64-134*			
Surrogate: 4-Bromofluorobenzene	*48*		*ug/L*	*50.0*		*96*	*52-147*			
Matrix Spike (8A27004-MS1)		**Source: A800159-05**		Prepared: 01/27/2008 12:06 Analyzed: 01/27/2008 21:21						
1,1-Dichloroethene	20	1.0	ug/L	20.0	0.46 U	100	57-142			
Benzene	24	1.0	ug/L	20.0	0.34 U	119	55-131			
Trichloroethene	20	1.0	ug/L	20.0	0.30 U	98	52-135			
Toluene	23	1.0	ug/L	20.0	0.38 U	113	58-148			
Chlorobenzene	21	1.0	ug/L	20.0	0.27 U	107	57-140			
Surrogate: Dibromofluoromethane	*45*		*ug/L*	*50.0*		*90*	*40-141*			
Surrogate: Toluene-d8	*49*		*ug/L*	*50.0*		*98*	*64-134*			
Surrogate: 4-Bromofluorobenzene	*47*		*ug/L*	*50.0*		*94*	*52-147*			
Matrix Spike Dup (8A27004-MSD1)		**Source: A800159-05**		Prepared: 01/27/2008 12:06 Analyzed: 01/27/2008 21:51						
1,1-Dichloroethene	21	1.0	ug/L	20.0	0.46 U	105	57-142	5	16	
Benzene	22	1.0	ug/L	20.0	0.34 U	112	55-131	6	12	
Trichloroethene	21	1.0	ug/L	20.0	0.30 U	106	52-135	8	40	
Toluene	24	1.0	ug/L	20.0	0.38 U	119	58-148	5	21	
Chlorobenzene	23	1.0	ug/L	20.0	0.27 U	116	57-140	8	20	
Surrogate: Dibromofluoromethane	*42*		*ug/L*	*50.0*		*84*	*40-141*			
Surrogate: Toluene-d8	*46*		*ug/L*	*50.0*		*92*	*64-134*			
Surrogate: 4-Bromofluorobenzene	*44*		*ug/L*	*50.0*		*89*	*52-147*			
Semivolatile Organic Compounds by GC - Quality Control										
Batch 8A30017 - EPA 504/8011										
Blank (8A30017-BLK1)				Prepared: 01/30/2008 11:41 Analyzed: 01/30/2008 13:01						
1,2-Dibromoethane	0.010 U	0.020	ug/L							U
1,2-Dibromo-3-chloropropane	0.008 U	0.020	ug/L							U
Surrogate: 1,3-Dichlorobenzene	*0.33*		*ug/L*	*0.250*		*132*	*83-150*			
LCS (8A30017-BS1)				Prepared: 01/30/2008 11:41 Analyzed: 01/30/2008 13:12						
1,2-Dibromoethane	0.23	0.020	ug/L	0.250		92	49-154			

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes
Semivolatile Organic Compounds by GC - Quality Control										
Batch 8A30017 - EPA 504/8011										
LCS (8A30017-BS1) Continued				Prepared: 01/30/2008 11:41 Analyzed: 01/30/2008 13:12						
1,2-Dibromo-3-chloropropane	0.24	0.020	ug/L	0.250		97	49-140			
Surrogate: 1,3-Dichlorobenzene	*0.35*		*ug/L*	*0.250*		*138*	*83-150*			
Matrix Spike (8A30017-MS1)		**Source: A800548-01**		Prepared: 01/30/2008 11:41 Analyzed: 01/30/2008 13:23						
1,2-Dibromoethane	0.27	0.020	ug/L	0.250	0.010 U	107	49-154			
1,2-Dibromo-3-chloropropane	0.28	0.020	ug/L	0.250	0.008 U	113	49-140			
Surrogate: 1,3-Dichlorobenzene	*0.36*		*ug/L*	*0.250*		*144*	*83-150*			
Matrix Spike Dup (8A30017-MSD1)		**Source: A800548-01**		Prepared: 01/30/2008 11:41 Analyzed: 01/30/2008 13:34						
1,2-Dibromoethane	0.26	0.020	ug/L	0.250	0.010 U	104	49-154	3	11	
1,2-Dibromo-3-chloropropane	0.27	0.020	ug/L	0.250	0.008 U	109	49-140	4	15	
Surrogate: 1,3-Dichlorobenzene	*0.34*		*ug/L*	*0.250*		*135*	*83-150*			
Metals by EPA 6000/7000 Series Methods - Quality Control										
Batch 8A28012 - EPA 3005A										
Blank (8A28012-BLK1)				Prepared: 01/28/2008 12:26 Analyzed: 01/29/2008 13:54						
Sodium	0.100 U	1.00	mg/L							U
LCS (8A28012-BS1)				Prepared: 01/28/2008 12:26 Analyzed: 01/29/2008 14:01						
Sodium	25.0	1.00	mg/L	25.0		100	85-115			
Matrix Spike (8A28012-MS1)		**Source: A800490-02**		Prepared: 01/28/2008 12:26 Analyzed: 01/29/2008 14:18						
Sodium	26.4	1.00	mg/L	25.0	0.100 U	106	85-115			
Matrix Spike Dup (8A28012-MSD1)		**Source: A800490-02**		Prepared: 01/28/2008 12:26 Analyzed: 01/29/2008 14:26						
Sodium	26.7	1.00	mg/L	25.0	0.100 U	107	85-115	1	20	
Post Spike (8A28012-PS1)		**Source: A800490-02**		Prepared: 01/29/2008 12:00 Analyzed: 01/29/2008 14:35						
Sodium	2570	100	ug/L	2450	-0.154	105	75-125			
Batch AA02903 - 8A28012										
Serial Dilution (AA02903-SRD1)		**Source: A800490-02**		Prepared: 01/28/2008 00:00 Analyzed: 01/29/2008 14:43						
Sodium	0.500 U	5.00	ug/L		0.500 U				10	U
Serial Dilution (AA02903-SRD2)				Prepared: 01/28/2008 00:00 Analyzed: 01/29/2008 20:17						
Sodium	0.901 U	5.00	ug/L						10	U
Classical Chemistry Parameters - Quality Control										
Batch 8A24015 - NO PREP										
Blank (8A24015-BLK1)				Prepared: 01/24/2008 14:33 Analyzed: 01/24/2008 18:46						
Chloride	**0.49** I	1.0	mg/L							J
LCS (8A24015-BS1)				Prepared: 01/24/2008 14:33 Analyzed: 01/24/2008 19:05						
Chloride	260 V	1.0	mg/L	250		103	85-118			B
Matrix Spike (8A24015-MS1)		**Source: A800159-05**		Prepared: 01/24/2008 14:33 Analyzed: 01/24/2008 19:25						
Chloride	280 V	1.0	mg/L	255	4.3	108	85-118			B
Matrix Spike Dup (8A24015-MSD1)		**Source: A800159-05**		Prepared: 01/24/2008 14:33 Analyzed: 01/24/2008 19:44						
Chloride	280 V	1.0	mg/L	255	4.3	107	85-118	1	10	B
Batch 8A27001 - NO PREP										
Blank (8A27001-BLK1)				Prepared: 01/27/2008 09:30 Analyzed: 01/28/2008 21:52						
Total Dissolved Solids	10 U	10	mg/L							U
LCS (8A27001-BS1)				Prepared: 01/27/2008 09:30 Analyzed: 01/28/2008 21:52						
Total Dissolved Solids	310	10	mg/L	300		105	87-114			

QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sanple Notes
Classical Chemistry Parameters - Quality Control										
Batch 8A27001 - NO PREP										
Duplicate (8A27001-DUP1)		**Source: A800159-06**		Prepared: 01/27/2008 09:30 Analyzed: 01/28/2008 21:52						
Total Dissolved Solids	290	10	mg/L		310			6	10	
Batch 8A30001 - NO PREP										
Blank (8A30001-BLK1)				Prepared: 01/30/2008 08:49 Analyzed: 01/30/2008 10:41						
Ammonia as N	0.008 U	0.35	mg/L							U
LCS (8A30001-BS1)				Prepared: 01/30/2008 08:49 Analyzed: 01/30/2008 10:42						
Ammonia as N	1.0	0.35	mg/L	1.00		102	90-110			
Matrix Spike (8A30001-MS1)		**Source: A800159-01**		Prepared: 01/30/2008 08:49 Analyzed: 01/30/2008 10:45						
Ammonia as N	0.91	0.35	mg/L	1.00	0.008 U	91	90-110			
Matrix Spike Dup (8A30001-MSD1)		**Source: A800159-01**		Prepared: 01/30/2008 08:49 Analyzed: 01/30/2008 10:46						
Ammonia as N	0.91	0.35	mg/L	1.00	0.008 U	91	90-110	0.3	10	

Special Notes

[1] V = Analyte is found in the associated blank as well as in the sample (CLP B-flag).

[2] D = Data reported from a dilution

[3] I = Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

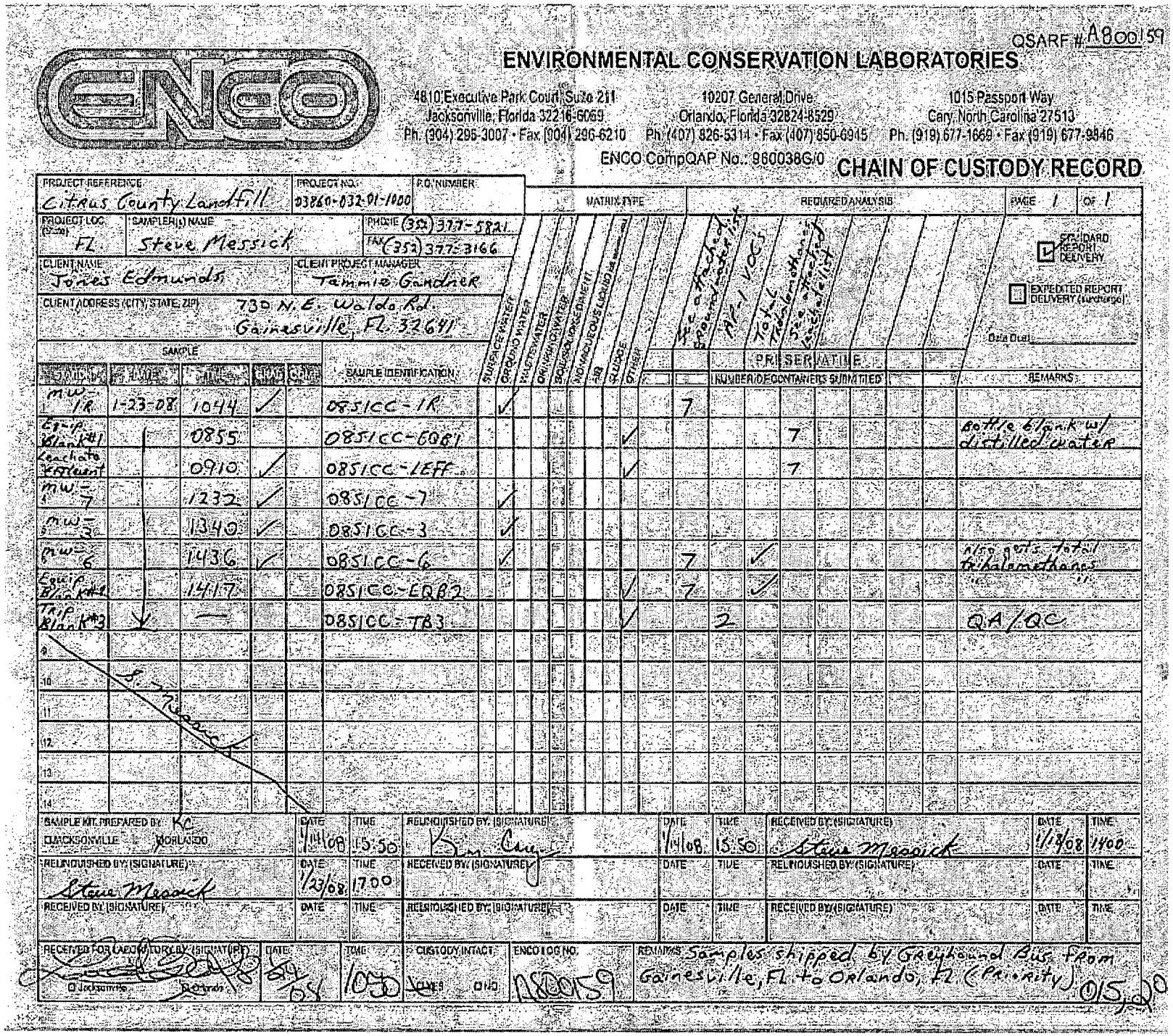
[4] O-01 = This compound is a common laboratory contaminant.

[5] QV-01 = The method blank had a positive result for the analyte; however, the concentration in the method blank is less than 10% of the sample result, which minimizes the impact on the deviation.

[6] U = Analyte included in the analysis, but not detected

LABORATORY CERTIFICATION SUMMARY

Analysis	Matrix	Cert ID	Cert Number
8011	Water	NELAC	E83182
8260B Appendix 1 FL	Water	NELAC	E83182
8260B Arom/Halo	Water	NELAC	E83182
Ammonia 350.1	Water	NELAC	E83182
Chloride 300	Water	NELAC	E83182
Sodium Total EPA 6020	Water	NELAC	E83182
TDS 160.1	Water	NELAC	E83182



QSARF # A800159

ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Court, Suite 211, Jacksonville, Florida 32216-6069, Ph. (904) 296-3007 · Fax (904) 296-6210
10207 General Drive, Orlando, Florida 32824-8529, Ph. (407) 826-5314 · Fax (407) 850-6945
1015 Passport Way, Cary, North Carolina 27513, Ph. (919) 677-1669 · Fax (919) 677-9846

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Citrus County Landfill | PROJECT NO.: 03860-032-01-1000 | P.O. NUMBER: | PAGE 1 OF 1

PROJECT LOC. (State): FL | SAMPLER(s) NAME: Steve Messick | PHONE: (352) 377-5821 | FAX: (352) 377-3166

CLIENT NAME: Jones Edmunds | CLIENT PROJECT MANAGER: Tammie Gardner

CLIENT ADDRESS (CITY, STATE, ZIP): 730 N.E. Waldo Rd. Gainesville, FL 32641

STANDARD REPORT DELIVERY

EXPEDITED REPORT DELIVERY (surcharge)

Date Due:

MATRIX TYPE: SURFACE WATER | GROUND WATER | WASTEWATER | DRINKING WATER | SOLID/SEMISOLID WASTE | NONAQUEOUS LIQUID WASTE | OIL | SLUDGE | OTHER

REQUIRED ANALYSIS: See attached Parameter list for MW-1, MW-5, MW-6 | Total Trihalomethanes for EQB2 | See attached list for TB3

PRESERVATIVE

SAMPLE NO.	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS SUBMITTED	REMARKS
MW-1R	1-23-08	1044	✓		085ICC-1R	7	
Equip Blank #1		0855			085ICC-EQB1	7	Bottle & blank w/ distilled water
Leachate Effluent		0910	✓		085ICC-LEFF	7	
MW-7		1232	✓		085ICC-7		
MW-3		1340	✓		085ICC-3		
MW-6		1436	✓		085ICC-6	7	also sent for Total Trihalomethanes
Equip Blank #2		1417			085ICC-EQB2	7	" "
Trip Blank #3	↓	—			085ICC-TB3	2	QA/QC
9							
10							
11							
12							
13							
14							

	DATE	TIME		DATE	TIME		DATE	TIME
SAMPLE KIT PREPARED BY: KC JACKSONVILLE / ORLANDO	1/14/08	15:50	RELINQUISHED BY: (SIGNATURE)	1/14/08	15:50	RECEIVED BY: (SIGNATURE) Steve Messick	1/14/08	1400
RELINQUISHED BY: (SIGNATURE) Steve Messick	1/23/08	1700	RECEIVED BY: (SIGNATURE)			RELINQUISHED BY: (SIGNATURE)		
RECEIVED BY: (SIGNATURE)			RELINQUISHED BY: (SIGNATURE)			RECEIVED BY: (SIGNATURE)		

RECEIVED FOR LABORATORY BY: (SIGNATURE) J Jacksonville R Orlando | DATE: 1/24/08 | TIME: 1050 | CUSTODY INTACT: YES / NO | ENCO LOG NO.: A800159

REMARKS: Samples shipped by Greyhound Bus from Gainesville, FL to Orlando, FL (Priority) 015.20

CITRUS COUNTY CENTRAL LANDFILL
FIRST QUARTER 2008
DEP PERMIT NO. 21375-008-SO/01

TOTAL TRIHALOMETHANES CALCULATION

Station ID Number	Station Name	Sample Date	Analysis Date	Numeric Result	Units	Storet Code	Parameter Name	Analysis Method	Sample Quarter
08Q1CC-LEFF	Leachate Effluent	1/23/2008	1/27/2008	<0.22	µg/L	032101	Bromodichloromethane	EPA 8260B	08Q1
08Q1CC-LEFF	Leachate Effluent	1/23/2008	1/27/2008	0.90	µg/L	032104	Bromoform	EPA 8260B	08Q1
08Q1CC-LEFF	Leachate Effluent	1/23/2008	1/27/2008	6.1	µg/L	032106	Chloroform	EPA 8260B	08Q1
08Q1CC-LEFF	Leachate Effluent	1/23/2008	1/27/2008	3.6	µg/L	032105	Dibromochloromethane	EPA 8260B	08Q1
08Q1CC-LEFF	**Leachate Effluent**	**1/23/2008**	**1/27/2008**	**10.6**	**µg/L**	**082080**	**Total Trihalomethanes**	**CALC**	**08Q1**

Station ID Number	Station Name	Sample Date	Analysis Date	Numeric Result	Units	Storet Code	Parameter Name	Analysis Method	Sample Quarter
08Q1CC-LEQB1	EQUBLK	1/23/2008	1/27/2008	<0.22	µg/L	032101	Bromodichloromethane	EPA 8260B	08Q1
08Q1CC-LEQB1	EQUBLK	1/23/2008	1/27/2008	<0.33	µg/L	032104	Bromoform	EPA 8260B	08Q1
08Q1CC-LEQB1	EQUBLK	1/23/2008	1/27/2008	<0.36	µg/L	032106	Chloroform	EPA 8260B	08Q1
08Q1CC-LEQB1	EQUBLK	1/23/2008	1/27/2008	<0.23	µg/L	032105	Dibromochloromethane	EPA 8260B	08Q1
08Q1CC-LEQB1	**EQUBLK**	**1/23/2008**	**1/27/2008**	**<1.14**	**µg/L**	**082080**	**Total Trihalomethanes**	**CALC**	**08Q1**

Station ID Number	Station Name	Sample Date	Analysis Date	Numeric Result	Units	Storet Code	Parameter Name	Analysis Method	Sample Quarter
08Q1CC-TB1	TRIP	1/23/2008	1/27/2008	<0.22	µg/L	032101	Bromodichloromethane	EPA 8260B	08Q1
08Q1CC-TB1	TRIP	1/23/2008	1/27/2008	<0.33	µg/L	032104	Bromoform	EPA 8260B	08Q1
08Q1CC-TB1	TRIP	1/23/2008	1/27/2008	<0.36	µg/L	032106	Chloroform	EPA 8260B	08Q1
08Q1CC-TB1	TRIP	1/23/2008	1/27/2008	<0.23	µg/L	032105	Dibromochloromethane	EPA 8260B	08Q1
08Q1CC-TB1	**TRIP**	**1/23/2008**	**1/27/2008**	**<1.14**	**µg/L**	**082080**	**Total Trihalomethanes**	**CALC**	**08Q1**

ATTACHMENT 4

FIELD DATA

GROUNDWATER SAMPLING LOG

SITE NAME: Citrus County Landfill / 03860-032-01-1000	SITE LOCATION: Lecanto, Florida	
WELL NO: Leachate Effluent	SAMPLE ID: 08S1CC-LEFF	DATE: 1-23-08

PURGING DATA

WELL DIAMETER (in): N/A	TUBING DIAMETER (in): N/A	WELL SCREEN LENGTH: N/A feet	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (N/A feet – feet) X gallons/foot = gallons Water Level Measured with: MPM-GNV-01

PURGE METHOD: 2.1 2.2 2.3 OR FS2222 (N/A)

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

N/A = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: N/A	PURGING ENDED AT: N/A	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR	ORP (mVolts)
0910	—	—	—	—	7.84	18.52	4220	2.64	4.57	Light yellow	None	129.8

SAMPLING DATA

SAMPLED BY (Print) / AFFILIATION: Steve Messick / Jones, Edmunds & Associates Inc.	SAMPLER(S) SIGNATURES: Steve Messick	SAMPLING INITIATED AT: 0910	SAMPLING ENDED AT: 0915

PUMP OR TUBING DEPTH IN WELL (feet): N/A	SAMPLE PUMP FLOW RATE: VOC Sampling Rate <100 ml/min ☑ Other Samples Rate (mL / min): N/A	TUBING MATERIAL CODE: PE	SAMPLING EQUIPMENT CODE: *
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOL	PRES. USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL PH	INTENDED ANALYSIS
08S1CC-LEFF	2	CG	40mL	HCL	None	N/A	AP-1 VOC's (8260B)
	2	CG	40mL	None		N/A	8011
	1	PE	250mL	HNO3		≤2	Na
	1	PE	250mL	H2SO4		≤2	T. Ammonia Nitrogen
	1	PE	250mL	None		N/A	Chlorides, TDS

REMARKS:

* Verified Sample pH as <2 or >12 (as applicable) at Leachate effluent
Sky Conditions: Cloudy Ambient Air Temperature: 20°C
Approx. Wind Speed and Direction: 0-5 E

Comments:

* Used unpreserved sample bottle to fill rest of kit.

Collected sample by dipping directly from the chlorine contact chamber using unpreserved bottle.

GROUNDWATER SAMPLING LOG

SITE NAME: Citrus County Landfill / 03860-032-01-1000	SITE LOCATION: Lecanto, Florida	
WELL NO: Equipment Blank # 1 for Leachate Effluent	SAMPLE ID: 08S1CC-EQB1	DATE: 1-23-08

PURGING DATA

WELL DIAMETER (in): N/A	TUBING DIAMETER (in): N/A	WELL SCREEN LENGTH: N/A feet	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

1 WELL VOLUME = (N/A feet – feet) X gallons/foot = gallons Water Level Measured with: MPM-GNV-01

PURGE METHOD: 2.1 2.2 2.3 OR FS2222 (N/A)

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

N/A = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: N/A	PURGING ENDED AT: N/A	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR	ORP (mVolts)
						S. Messick						

SAMPLING DATA

SAMPLED BY (Print) / AFFILIATION: Steve Messick / Jones, Edmunds & Associates Inc.	SAMPLER(S) SIGNATURES: Steve Messick	SAMPLING INITIATED AT: 0855	SAMPLING ENDED AT: 0900

PUMP OR TUBING DEPTH IN WELL (feet): N/A	SAMPLE PUMP VOC Sampling Rate <100 ml/min ☑ FLOW RATE Other Samples Rate (mL / min): N/A	TUBING MATERIAL CODE: PE	SAMPLING EQUIPMENT CODE: *
FIELD DECONTAMINATION: Y (N)	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOL	PRES. USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL PH	INTENDED ANALYSIS
08S1CC-EQB1	2	CG	40mL	HCL	None	N/A	AP-1 VOC's (8260B)
	2	CG	40mL	None		N/A	8011
	1	PE	250mL	HNO3		*	Na
	1	PE	250mL	H2SO4		*	T. Ammonia Nitrogen
	1	PE	250mL	None		N/A	Chlorides, TDS

REMARKS:

* Verified Sample pH as <2 or >12 (as applicable) at leachate effluent
Sky Conditions: cloudy Ambient Air Temperature: 19-20°C
Approx. Wind Speed and Direction: 0-5

Comments:

Bottle blank - New Lab bottle rinse with distilled water, Rinsed unpreserved lab bottle, then used that bottle to fill other bottles in Kit.

Collected sample by dipping directly from the chlorine contact chamber using unpreserved bottle.

Zeph. Dist. water Lot# 0829077241WF2303

QSARF # A800159

ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
Ph. (904) 296-3007 • Fax (904) 296-6210

10207 General Drive
Orlando, Florida 32824-8529
Ph. (407) 826-5314 • Fax (407) 850-6945

1015 Passport Way
Cary, North Carolina 27513
Ph. (919) 677-1669 • Fax (919) 677-9846

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE	PROJECT NO.	P.O. NUMBER
Citrus County Landfill	03860-032-01-1003	

PROJECT LOC. (State)	SAMPLER(s) NAME	PHONE	FAX
FL.	Steve Messick	(352) 377-5821	(352) 377-3166

CLIENT NAME	CLIENT PROJECT MANAGER
Jones Edmunds	Tammie Gardner

CLIENT ADDRESS (CITY, STATE, ZIP): 730 N.E. Waldo Rd. Gainesville, FL. 32641

PAGE 1 OF 1

☑ STANDARD REPORT DELIVERY
☐ EXPEDITED REPORT DELIVERY (surcharge)
Date Due:

SAMPLE STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	MATRIX: SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID (oil, solvent, etc.)	AIR	SLUDGE	OTHER	REQUIRED ANALYSIS: See attached groundwater list	PAP-1 VOC's	Total Trihalomethanes	See attached leachate list	PRESERVATIVE	NUMBER OF CONTAINERS SUBMITTED	REMARKS
1 MW-1R	1-23-08	1044	✓		085ICC-1R		✓								7						
Equip Blank #1	↓	0855			085ICC-EQB1									✓				7			Bottle blank w/ distilled water
Leachate Effluent		0910	✓		085ICC-LEFF									✓				7			
4 MW-7		1232	✓		085ICC-7		✓														
5 MW-3		1340	✓		085ICC-3		✓														
6 MW-6		1436	✓		085ICC-6		✓								7		✓				1/5 gets total trihalomethanes
Equip Blank #2		1417			085ICC-EQB2									✓	7		✓				" "
Trip Blank #3	↓	—			085ICC-TB3									✓		2					QA/QC
9																					
10	S. Messick																				
11																					
12																					
13																					
14																					

SAMPLE KIT PREPARED BY: KC ☐ JACKSONVILLE ☒ ORLANDO	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
	1/11/08	15:30	Kim Cline	1/11/08	15:50	Steve Messick	1/18/08	1400
RELINQUISHED BY: (SIGNATURE) Steve Messick	1/23/08	1700	RECEIVED BY: (SIGNATURE)			RELINQUISHED BY: (SIGNATURE)		
RECEIVED BY (SIGNATURE)			RELINQUISHED BY: (SIGNATURE)			RECEIVED BY: (SIGNATURE)		

RECEIVED FOR LABORATORY BY: (SIGNATURE) ☐ Jacksonville ☐ Orlando	DATE	TIME	CUSTODY INTACT ☐ YES ☐ NO	ENCO LOG NO.	REMARKS
					Samples shipped by Greyhound Bus from Gainesville, FL. to Orlando, FL. (Priority) GLI 3044923960

FT 1500 Field Measurement of Dissolved Oxygen (D.O.)

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

SITE NAME Citrus County landfill DATE 1/21/08

INSTRUMENT (MAKE/MODEL#) YSI 556 MPS INSTRUMENT # YSI - GNV - 01

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP

☐ TURBIDITY ☐ RESIDUAL Cl X DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A **Moist Air Chamber**

Zero D.O. Calibration Check Date 11/27/07 Reference Meter Book Steve - 01

(Zero D. O. checked with standard quarterly)

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE (mg/L)	Temperature (Deg C)	INSTRUMENT RESPONSE (mg/L)	(+/- 0.3 mg/L) DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
08/01/21	1336	A	8.49	23.46	8.51	0.02	Yes	Init.	km
↓	1747	A	8.96	20.73	8.89	0.07	Yes	Cont	km
08/01/22	0849	A	8.95	20.77	8.96	0.01	Yes	Init.	km
↓	1750	A	8.98	20.61	8.83	0.15	Yes	Cont.	km
08/01/23	0832	A	8.05	26.36	8.02	0.03	Yes	Init.	km
↓	1648	A	8.89	21.05	8.76	0.13	Yes	Cont.	km

FT 1100 Field Measurement of Hydrogen Ion Activity (pH)

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

SITE NAME Citrus County Landfill DATE 1/21/08

INSTRUMENT (MAKE/MODEL#) YSI 556 MPS INSTRUMENT # YSI - GNV - 01

Instrument Gain -5.082 Date Determined 1/21/08 (Acceptable Gain = Acceptable Slope)

(Range -5.597 to -4.579 acceptable) (Check Instrument Gain at the beginning of each week)

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY X pH ☐ ORP

☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 7.00 SU Lot # 2704402 Expiration Date APR 2009

Standard B 4.01 SU Lot # 2702258 Expiration Date FEB 2009

Standard C 10.00 SU Lot # 2706059 Expiration Date DEC 2008

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE (SU)	INSTRUMENT RESPONSE (SU)	(+/- 0.2 SU) DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
08/01/21	1339	A	7.00	7.03/7.00	Ø	Yes	Init.	Sm
↓	1342	B	4.01	4.03/4.01	Ø	Yes	Init.	Sm
	1344	C	10.00	9.98/10.00	Ø	Yes	Init.	Sm
	1749	B	4.01	4.02	0.01	Yes	Cont.	Sm
↓	1750	A	7.00	7.03	Ø	Yes	Cont.	Sm
08/01/22	0855	A	7.00	6.98	0.02	Yes	Init.	Sm
↓	0858	B	4.01	4.01	Ø	Yes	Init.	Sm
	0900	C	10.00	10.02	0.02	Yes	Init.	Sm
	1752	B	4.01	4.00	0.01	Yes	Cont.	Sm
	1753	A	7.00	7.03	0.03	Yes	Cont.	Sm
↓	1755	C	10.00	10.01	0.01	Yes	Cont.	Sm
08/01/23	0834	A	7.00	6.98	0.02	Yes	Init.	Sm
↓	0838	B	4.01	3.95	0.06	Yes	Init.	Sm
	0840	C	10.00	9.98	0.02	Yes	Init.	Sm
	1650	B	4.01	4.01	Ø	Yes	Cont.	Sm
	1651	A	7.00	7.01	0.01	Yes	Cont.	Sm
↓	1652	C	10.00	9.99	0.01	Yes	Cont.	Sm

FT 2100 Oxidation – Reduction Potential (ORP)

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

SITE NAME Citrus County Landfill **DATE** 1/21/08

INSTRUMENT (MAKE/MODEL#) YSI 556 MPS **INSTRUMENT #** YSI - GNV -01

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH **X** ORP

☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A **Zobell's Solution Mixed Standard** **Expiration Date** 5/11/08.

Stock Solution Lot # 07H100053 **Expiration Date** 08/2009.

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE (mV)	Temperature (Deg C)	INSTRUMENT RESPONSE (mV)	(+/- 10 mV) DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
08/01/21	1343	A	233.6	20.74	230.3/233.6	Ø	Yes	Init.	[initials]
↓	1752	A	234.4	20.11	233.9	0.5	Yes	Cont.	[initials]
08/01/22	0902	A	241.5	14.65	243.5	2.0	Yes	Init.	[initials]
↓	1756	A	234.9	19.67	233.3	1.6	Yes	Cont.	[initials]
08/01/23	0842	A	234.9	19.72	232.2	2.7	Yes	Init.	[initials]
↓	1654	A	234.5	19.98	233.0	1.5	Yes	Cont.	[initials]

FT 1200 Field Measurement of Specific Conductance

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

SITE NAME Citrus County Landfill DATE 1/21/08

INSTRUMENT (MAKE/MODEL#) YSI 556 MPS INSTRUMENT # YSI - GNV - 01

PARAMETER: *[check only one]*

☐ TEMPERATURE X CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP

☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 1413 umhos Lot # 2704230 Expiration Date APR 2008

Standard B 447 umhos Lot # 2704546 Expiration Date APR 2008

Standard C 84 umhos Lot # 2703544 Expiration Date MAR 2008

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE (umhos/cm)	INSTRUMENT RESPONSE (umhos/cm)	(+/- 5%) DEV.	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
08/01/21	1350	A	1413	1408/1413	Ø	Yes	Init.	sm
	1353	B	447	456	<2	Yes	Init.	sm
	1355	C	84	87	<4	Yes	Init.	sm
	1754	~~1754~~ C	84	87	<4	Yes	Cont.	sm
	1755	B	447	453	<2	Yes	Cont.	sm
↓	1757	A	1413	1409	<1	Yes	Cont.	sm
08/01/22	0904	A	1413	1420	<1	Yes	Init.	sm
	0906	B	447	451	<1	Yes	Init.	sm
	0908	C	84	85	<2	Yes	Init.	sm
	1758	C	84	86	<3	Yes	Cont.	sm
	1759	B	447	452	<2	Yes	Cont.	sm
↓	1802	A	1413	1411	<1	Yes	Cont.	sm
08/01/23	0844	A	1413	1419	<1	Yes	Init.	sm
	0845	B	447	450	<1	Yes	Init.	sm
	0846	C	84	84	Ø	Yes	Init.	sm
	1656	C	84	86	<3	Yes	Cont.	sm
	1657	B	447	456	<2	Yes	Cont.	sm
	1702	A	1413	1419	<1	Yes	Cont.	sm
* ↓	1704	D	8974	8867	<2	Yes	Cont	sm

*Standard "D" 8974 µS Lot # 2704200 EXP. Date: APR 2008

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

SITE NAME Citrus County Landfill DATE 1/21/08

INSTRUMENT (MAKE/MODEL#) Hach 2100P INSTRUMENT # TB-GNV-01

Instrument Calibration Date 11/1/07 Reference Meter Book Steve-01

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP

X TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A Gel Standard 3.52 NTU

Standard B Gel Standard 41.9 NTU

Standard C Gel Standard 457 NTU

Standard D Measurement Cell + Distilled Water <0.25NTU

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE (NTU)	INSTRUMENT RESPONSE (NTU)	(+/- 6.5%) DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
08/01/21	1358	A	3.52	3.62	<3	Yes	Init.	fm
	1359	B	41.6	42.9	<4	Yes	Init.	fm
	1400	D	≤0.25	0.20	—	—	Init.	fm
	1759	A	3.52	3.59	<2	Yes	Cont.	fm
	1800	B	41.6	42.8	<3	Yes	Cont.	fm
↓	1800	D	≤0.25	0.17	—	—	Cont.	fm
08/01/22	0915	A	3.52	3.63	<4	Yes	Init.	fm
	0917	B	41.9	43.1	<3	Yes	Init.	fm
	0918	D	≤0.25	0.18	—	—	Init.	fm
	1802	A	3.52	3.58	<2	Yes	Cont.	fm
	1804	B	41.9	~~41.9~~ 43.0	~~43.0~~ <3 fm	Yes	Cont.	fm
↓	1805	D	0.25	0.20	—	—	Cont.	fm
08/01/23	0835	A	3.52	3.66	<4	Yes	Init.	fm
	0836	B	41.9	43.0	<3	Yes	Init.	fm
	0838	D	≤0.25	0.24	—	—	Init.	fm
	1706	A	3.52	3.63	<4	Yes	Cont.	fm
	1708	B	41.9	42.9	<3	Yes	Cont.	fm
↓	1709	D	≤0.25	0.22	—	—	Cont.	fm

Steve's

DEP-SOP-001/01 Page 1 of 1

FT 1400 Field Measurement of Temperature

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

SITE NAME JEA Test DATE 10/15/07

INSTRUMENT (MAKE/MODEL#) YSI 556 MPS INSTRUMENT # YSI - GNV - 01
03E1047 AB

PARAMETER: *[check only one]*

X TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP

☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A NIST Thermometer ~0 °C #3266 Cal Date 11/13/06

Standard B NIST Thermometer ~25 °C #3266 Cal Date "

Standard C NIST Thermometer ~40 °C #3266 Cal Date "

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE (C)	INSTRUMENT RESPONSE (C)	(+/- 0.2°C) DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	CALIBRATOR INITIALS
07/10/15	13:32	A	0.23	0.21	-0.02	Yes	I	CKH
"	13:37	B	25.78	25.77	-0.01	"	"	"
"	13:48	C	40.80	40.85	+0.05	"	"	"

Brooklyn Thermometer Company Inc.

www.brooklynthermometer.com
90 Verdi Street
Farmingdale, NY 11735
Phone: 631-694-7610 • Fax: 631-694-6329

Factory Certificate

Liquid In Glass Thermometer

Marked: 3266

Range: -1 to 50°C in 0.1° Divisions

Immersion: 76mm

Catalog Number: 3546Y-ERT-FC

Tested For: Jones Edmunds & Associates Inc. Job #VE0208

Temperature	Thermometer Reading	Correction
0°C	0.02	-0.02
Recertification of test performed by ERTCO dated December 11, 2001:		
10°C	10.06	-0.06
20°C	20.00	0.00
30°C	30.04	-0.04
37°C	37.06	-0.06
40°C	40.06	-0.06
50°C	50.06	-0.06

REFERENCE NIST TEST NO.: 272630-06

This thermometer has been tested by comparison with standards certified by the National Institute of Standards & Technology (formerly NBS). For applicable accuracy tolerance and factors affecting its use refer to N.B.S. Monograph 150. If the correction is + the true temperature is higher than the thermometer reading; if the correction is - the true temperature is lower than the thermometer reading. All temperatures are based on the ITS-90. If the ice point is included, a subsequent change in its reading will change all other readings by the same amount. Calibration per MIL-STD-45662A, ANSI /NCSL Z540-1. This certificate may only be reproduced in its entirety.

Brooklyn Thermometer Company Inc.
per Todd H. Teichert

November 13, 2006 T.H. Teichert