

**\*\* Transmit Conf. Report \*\***

P.1

Jul 3 2001 13:50

Telephone Number	Mode	Start	Time	Pages	Result	Note
(020) SOLID WST/TA	NORMAL	3,13:44	5'16"	14	* O K	

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	3804 Coconut Palm Drive Tampa, FL 33619-8318
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# FAX

Date: 7/3/01  
 Number of pages including cover sheet: \_\_\_\_\_

To: DAVID MASON  
DEP  
SW Station

Phone: \_\_\_\_\_  
 Fax phone: \_\_\_\_\_  
 CC: \_\_\_\_\_

From: duford

Phone: (813) 744-6100 x 382  
 Fax phone: (813) 744-6125

REMARKS:  Urgent  For your review  Reply ASAP  Please comment

ENTERPRISE LCU  
our June 29th letter

**U.S. Postal Service**  
**CERTIFIED MAIL RECEIPT**  
*(Domestic Mail Only; No Insurance Coverage Provided)*

7099 3400 0001 9758 7926

Article Sent To:  
*Sid Larkin + Son, Inc*

Postage	\$
Certified Fee	
*Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees</b>	<b>\$</b>

*629-01*  
 Postmark Here

Name (Please Print Clearly) (to be completed by mailer)  
*Gen Larkin*  
 Street, Apt. No., or PO Box No.  
*P.O. Box 1747*  
 City, State, ZIP+4  
*Dade City FL 33526*  
 PS Form 3800, July 1999 See Reverse for Instructions

is your RETURN ADDRESS completed on the reverse side?

*Enterprise Class MLK*  
**SENDER:** # *177582-001-8 + 17982-002-50*  
 ■ Complete items 1 and/or 2 for additional services.  
 ■ Complete items 3, 4a, and 4b.  
 ■ Print your name and address on the reverse of this form so that we can return this card to you.  
 ■ Attach this form to the front of the mailpiece, or on the back if space does not permit.  
 ■ Write "Return Receipt Requested" on the mailpiece below the article number.  
 ■ The Return Receipt will show to whom the article was delivered and the date delivered.

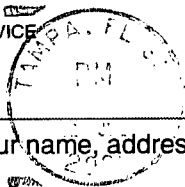
I also wish to receive the following services (for an extra fee):  
 1.  Addressee's Address  
 2.  Restricted Delivery  
 Consult postmaster for fee.

3. Article Addressed to:  
*John Larkin*  
*Sid Larkin + Son, Inc*  
*P.O. Box 1747*  
*Dade City, FL 33526*  
 5. Received By: (Print Name)  
*JON LAR KIN*  
 6. Signature: (Addressee or Agent)  
*X [Signature]*

4a. Article Number  
*7099 3400 0001 9758 7926*  
 4b. Service Type  
 Registered  Certified  
 Express Mail  Insured  
 Return Receipt for Merchandise  COD  
 7. Date of Delivery  
*7/2/01*  
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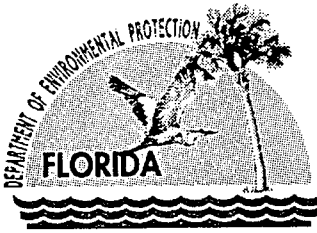
• Print your name, address, and ZIP Code on this box •

State of Florida  
Department of Environmental Protection  
3804 Coconut Palm Drive  
Tampa, Florida 33619-8318

RECEIVED  
JUL 03 2001  
BY SOUTHWEST DISTRICT  
Department of Environmental Protection

Kim Ford - Solid Waste





Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

David B. Struhs  
Secretary

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

June 29, 2001

Mr. Jon Larkin  
Sid Larkin & Son, Inc.  
P.O. Box 1747  
Dade City, FL 33526

**Re: Enterprise Class III Landfill - Pasco County  
Construction and Operation Permits  
Pending Permit Nos.: #177982-001-SC and 177982-002-SO**

Dear Mr. Larkin:

The Department is currently evaluating your applications for construction and operation permits. It has been 199 days since your permit applications were initially received. The Department has requested additional information in writing on 2 occasions, and has frequently discussed many items of concern with your consultants. Although responses to both of the Department's letters have been received, some of the same items need clarification as explained in Mr. Morris' June 28<sup>th</sup> memorandum (attached). As a reasonable incentive to avoid unnecessary delays in this process, your permit application is deemed complete as of June 1, 2001 - the date the Department received your response to our last request for additional information.

Therefore, the Department intends to make its decision regarding final disposition (issuance or denial) of the pending permit no later than August 30, 2001, in accordance with Florida Administrative Code (F.A.C.) 62-4.055(5). Your immediate attention to resolving all items in need of clarification would be greatly appreciated. Department staff will be available for review of any supplemental or replacement information you may provide within a reasonable timeframe to allow for issuance of the permit.

"More Protection, Less Process"

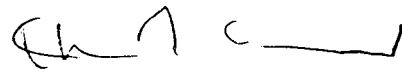
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Mr. Jon Larkin  
Sid Larkin & Son, Inc.

June 29, 2001  
Page 2

However, as required by F.A.C. 62-4.070(2), if after review of the application and all the information, the Department determines that the applicant-Sid Larkin & Son, Inc. has not provided reasonable assurance that the facility will be operated in accordance with applicable rules, the permit would be denied. If you have any questions, you may call me at (813) 744-6100, extension 382.

Sincerely,



Kim B. Ford, P.E.  
Solid Waste Section  
Division of Waste Management

KBF/ab  
Attachment

cc: Roderick Cashe, P.E., Hartman & Associates  
James Golden, P.G., Hartman & Associates  
Robert Butera, P.E., FDEP Tampa  
Susan Pelz, P.E., FDEP Tampa  
John Morris, P.G., FDEP Tampa

Florida Department of  
**Environmental Protection**

**Memorandum**

TO: Kim Ford, P.E.  
FROM: John R. Morris, P.G. JRM  
DATE: June 28, 2001  
SUBJECT: Proposed Enterprise Recycling and Disposal Class III Landfill  
Pending Permit Nos. 177982-001-SC and 177982-002-SO  
Hydrogeologic and Monitoring Review Comments  
cc: *of* Robert Butera, P.E.

I have reviewed the following submittals in support of the permit application for the referenced facility that were provided in response to the Department's letter requesting additional information dated May 2, 2001:

3. *Request for Additional Information, Dated May 2, 2001, Sid Larkin & Son, Inc., Enterprise Recycling and Disposal Facility, Class III Landfill, Pasco County, Florida*, prepared by Hartman & Associates, Inc. (HAI), dated May 18, 2001, received May 21, 2001;
4. *Addendum to Response to Request for Additional Information, Dated May 2, 2001, Sid Larkin & Son, Inc., Enterprise Recycling and Disposal Facility, Class III Landfill, Pasco County, Florida*, prepared by HAI, dated May 31, 2001, received June 1, 2001; and,
5. *Correction to May 29, 2001 Submittal*, prepared by HAI, dated June 7, 2001, received via facsimile June 7, 2001.

My review focused on the hydrogeologic and monitoring aspects of the proposed landfill. The comment numbers presented herein are consistent with my memoranda dated January 10, and May 1, 2001, and also reference the above-mentioned submittal numbers. Those comments which have been resolved by these or previously received submittals include the notation: "No additional information is required." However, several comments (presented below in *italics*) have not been fully addressed and the submitted information is considered **not sufficient** to support the description of site hydrogeology and the proposed monitoring program for the proposed Enterprise Class III landfill and does not demonstrate compliance with Rules 62-701.410 and 62-701.510, F.A.C., respectively.

**KIM FORD'S REVIEW COMMENTS**

**Part B - Disposal Facility General Information**

1. B.21., B.22., B.24., and B.25. It is noted that revisions to Chapter 62-701, F.A.C., effective May 27, 2001, change the rule citations for Class III wastes and landfills. The definition of Class III wastes is presented in Rule 62-701.200(14), F.A.C., and the exemption language is presented in Rule 62-701.340(3)(c), F.A.C. It is also noted that the revised rule indicates that it is the applicant who demonstrates that no significant threat to the environment will result from the requested exemption.

Submittal 3 includes statements regarding the applicability of the requested exemption from liner and leachate collection requirements at the subject facility. The following comments address several of these statements:

- a. It is indicated that the Department's publication entitled *Florida Class III Lined Landfill Leachate Data Summary Report*, dated May 18, 2000, includes average concentrations for leachate constituents which are not representative of actual concentrations. Richard Tedder, FDEP Tallahassee at (850) 488-0300, should be contacted to obtain revised leachate average concentrations that include the results for non-detects.

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

*Printed on recycled paper.*

- b. It is indicated that the leachate data for the West Pasco Class III landfill does not exceed FDEP standards or guidance concentrations, with the exception of mercury. The attached table provides a summary of leachate samples collected at the West Pasco Class III landfill for the period from August 1999 to February 2001. It is noted that exceedances of ground water standards were reported for the following sampling events: August 1999 – total dissolved solids; February 2000 – iron; July 2000 – pH, iron, and total dissolved solids; February 2001 – iron, total dissolved solids, and benzene.
- c. It is indicated that the Cedar Trail Class III landfill has a similar clay layer and has not experienced any significant ground water exceedances. It is noted that site hydrogeology and the consistency of the emplaced phosphatic clay slimes at the Cedar Trail Class III landfill is considered to be dissimilar to the laterally and vertically variable native sandy clay and clay sediments at the proposed Enterprise Class III landfill. It is also noted that persistent exceedances of standards have been reported for one of the detection wells at Cedar Trail Class III that are not considered to be “naturally occurring”.

Submittal 4 includes calculations of dilution for potential pollutants based on rainfall from the upgradient ground water basin from west to east across the site. The following comments address the dilution approach:

- d. It is understood that the area of the region upgradient of Cells 1 and 2 that contribute ground water ( $A_u$ ) was based on topography from quadrangle maps for the vicinity of the subject property. Documentation of the area upgradient of Cells 1 and 2 was not included in the submittal for review.
- e. The difference in effective porosity between native soils and emplaced wastes is not addressed in the dilution calculation.
- f. The seasonal variability in hydraulic gradient and direction of ground water flow is not addressed in the dilution calculation.
- g. The assumption that all potential pollutants are not present in background ( $C_b$ ) is not considered to be valid. The attached table presents water quality data for surficial aquifer wells located within 50 miles of Dade City that are considered to be more representative of background conditions.

It is noted that Department technical staff do not consider the dilution equation and the associated assumptions to adequately describe the transient nature of the surficial aquifer at the subject property. A more detailed analytical solution or a numerical model would be required to characterize potential impacts to ground water quality. However, given the other assurances provided in Submittal 3 regarding control of unauthorized wastes, site hydrogeology, stormwater control, ground water monitoring, and cell certification, the Department is not requesting a more comprehensive demonstration of potential ground water quality impacts in the surficial aquifer for the proposed Enterprise Class III landfill, at this time.

#### **JOHN MORRIS' REVIEW COMMENTS**

##### **Part G – Landfill Construction Requirements (Rule 62-701.400, F.A.C.)**

1. G.9.a. – Gas Control System. This comment was previously addressed. **No additional information is required.**
2. G.9.d. – Gas Monitoring Program (Rule 62-701.400(10)(c), F.A.C.)
  - a. The revised Gas Monitoring Survey Form presented in Submittal 3 is noted. **No additional information is required.**
  - b. This comment was previously addressed. **No additional information is required.**

**Part H – Hydrogeological Investigation Requirements (Rule 62-701.410, F.A.C.)**

**3. H.1.b. – Rate and Direction of Ground Water Flow (Rule 62-701.410(1)(a)1, F.A.C.)**

- a. The responses provided in Submittal 3 that the inferred contours are not based on actual water level measurements and that the four water level measurement events conducted at the subject property are considered to be representative of seasonal fluctuations are noted. **No additional information is required.**
- b. Please respond to the following comments provided regarding the response:
  - i. *The response provided in Submittal 3 does not appear to address the response to comment No. 8.e., regarding the occurrence of ground water relative to the top of limestone. It is noted that the elevations reported for P-5 appear to fit on both Figures 11.1 and 14.1, and it is not clear which unit(s) is monitored by P-5.*
  - ii. *The boring log provided for P-10B (Submittal 3, Appendix 5-A) indicates the boring was completed 55 feet below land surface, while the well completion log for P-10 (Submittal 2, Appendix 5-A) indicates the piezometer was installed to a depth of 75 feet below land surface. It has not been demonstrated what zone is monitored at this location.*
  - iii. *It is noted that the response provided in Submittal 3 indicates a land surface elevation at P-10 (+129 ft NGVD) that differs from the elevation shown on Figure 11.1. **No additional information is required.***
  - iv. *The boring log provided for P-11B (Submittal 3, Appendix 5-A) is noted. **No additional information is required.***
  - v. *The revision to Figure 6.2 (Submittal 3) is noted. **No additional information is required.***
  - vi. *The revision to the boring log for P-12 (Submittal 3, Appendix 5-A) appears to be inappropriate. The documentation from Universal Engineering Services (UES) regarding the indicated confirmation that the description of “clayey silt with limerock” is analogous to limestone has not been provided. It is also noted that the modification provided to the boring log for P-12 has changed the soil encountered at a depth of 8 feet below land surface described as “yell brn clay sand/sandy cl” to limestone.*
  - vii. *The revision to the boring log provided for P-1A (Submittal 3, Appendix 5-A) is noted. The documentation from UES regarding the indicated confirmation that the description of “clayey silt with limerock” is analogous to limestone has not been provided.*
  - viii. *The discussion provided in Submittal 3 regarding anomalous ground water elevations at P-11 is noted. It is also noted that the potentiometric surface contour map provided for water levels measured on May 8, 2001 (Submittal 3, Figure 14.2) incorrectly includes the ground water elevation at P-3A. Revision of Figure 14.2 to exclude data from P-3A will cause substantial changes to the direction of ground water flow.*
- c. This comment was previously addressed. **No additional information is required.**
- d. The revisions of slug test analyses for P-2 (slug out), P-3 (slug out), P-3a (slug in), and P-7 (slug out) are noted. Please respond to the following comments provided regarding the slug tests:
  - i. The response provided in Submittal 3 regarding the time scale for the slug in test at P-3 is noted. **No additional information is required.**
  - ii. The responses provided in Submittal 3 regarding the slug in tests at P-3 and P-7 are noted. **No additional information is required.**
- e. The response provided in Submittal 3 regarding the slug out test at P-5 is noted. **No additional information is required.**



- f. The responses provided regarding the results of the slug tests are noted. Please address the following comments:
    - i. The response provided in Submittal 3 indicating an arithmetic mean will be used to average hydraulic conductivity values is noted. **No additional information is required.**
    - ii. The response provided in Submittal 3 indicating that Section 5.2.2 and Table 5-2 of the Hydrogeological Investigation have been revised to reflect the slug test results provided in Submittal 1 is noted. **No additional information is required.**
  - g. This comment was previously addressed. **No additional information is required.**
  - h. This comment was previously addressed. **No additional information is required.**
  - i. This comment was previously addressed. **No additional information is required.**
  - j. The revision to the ground water velocity calculation provided in Submittal 3 (Section 5.2.2 of the Hydrogeological Investigation) is noted. **No additional information is required.**
4. H.1.c. – Background Water Quality (Rule 62-701.410(1)(a)2., F.A.C.). This comment was previously addressed. **No additional information is required.**
5. H.1.e. – Site Stratigraphy (Rule 62-701.410(1)(a)4., F.A.C.).
- a. The response provided in Submittal 3 that individual boring logs for L-12 through L-17 are not available is noted. **No additional information is required.**
  - b. The response provided in Submittal 3 that all geological work was supervised by Mr. James Golden, P.G., is noted. **No additional information is required.**
  - c. The response that revised geological cross sections (Figures 5, 6, 6.1 and 6.2) have been provided to distinguish between the clayey sand and sandy clay/clay sediments and that a consistent sandy clay layer underlies the site is noted. Please respond to the comments provided regarding the revised cross sections:
    - i. The response provided in Submittal 3 describing the variability between borings L-13 and DCL01-9 is noted. **No additional information is required.**
    - ii. The response provided in Submittal 3 describing the revision to Figure 5 depicting the sandy clay/clay layer at boring B-7 and adjacent borings DCL01-9/L-13 is noted. **No additional information is required.**
    - iii. The response provided in Submittal 3 describing the revision to Figure 5 depicting the top of limestone at boring DCL01-11 is noted. **No additional information is required.**
    - iv. The response provided in Submittal 3 describing the revision to Figure 6 depicting the land surface elevation at boring B-2 is noted. **No additional information is required.**
    - v. The response provided in Submittal 3 describing the revision to Figure 6 depicting the sandy clay layer at boring B-8 is noted. **No additional information is required.**
    - vi. The response provided in Submittal 3 describing the revision to Figure 6.1 depicting the interpolated occurrence of limestone at boring B-15 is noted. **No additional information is required.**
    - vii. The response provided in Submittal 3 describing the revision to Figure 6.1 depicting the sandy clay layer at boring log DCL01-1 is noted. **No additional information is required.**
    - viii. The response provided in Submittal 3 describing the procedures to be implemented to ensure that the sandy clay/clay layer in the vicinity of boring DCL01-1 will not be breached is noted. **No additional information is required.**

- ix. The response provided in Submittal 3 indicating that the revisions to Figure 6.2 reflect review comments Nos. 3.b.ii. through 3.b.v., is noted. **No additional information is required.**
  - d. This comment was previously addressed. **No additional information is required.**
  - e. This comment was previously addressed. **No additional information is required.**
6. H.1.g/H.1.i -- Inventory of Public and Private Wells (Rule 62-701.410(1)(b), F.A.C.). This comment was previously addressed. **No additional information is required.**

**Part I – Geotechnical Investigation (Rule 62-701.420, F.A.C.)**

7. I.1.b. – Lineaments (Rule 62-701.410(2)(b), F.A.C.). This comment was previously addressed. **No additional information is required.**

**Part L – Water Quality and Leachate Monitoring (Rule 62-701.510, F.A.C.)**

8. L.1.c – Ground Water Monitoring (Rule 62-701.510(3), F.A.C.).
- a. The response provided in Submittal 3 indicating when proposed wells MW-1A and MW-14 will be installed and the revision to Section 5.3.1 of the Hydrogeological Investigation is noted. **No additional information is required.**
  - b. This comment was previously addressed. **No additional information is required.**
  - c. This comment was previously addressed. **No additional information is required.**
  - d. The response provided in Submittal 3 indicating that Section 5.3.2.2 of the Hydrogeological Investigation has been revised to clarify the source of historical ground water level data is noted. **No additional information is required.**
  - e. The response provided in Submittal 3 indicating that Section 5.3.2.2 and Figure 17 have been revised to reflect construction of the Floridan monitor wells with 10 or 15 feet of screen is noted. **No additional information is required.**
  - f. This comment was previously addressed. **No additional information is required.**
9. L.1.f. – Routine Sampling Frequency (Rule 62-701.510(6), F.A.C.).
- a. The response provided in Submittal 3 indicating that Section 5.4.2 of the Hydrogeological Investigation has been revised to reflect the staggered schedule of monitor well installation is noted. **No additional information is required.**
  - b. This comment was previously addressed. **No additional information is required.**
  - c. This comment was previously addressed. **No additional information is required.**
10. L.1.h. – Water Quality Monitoring Reports (Rule 62-701.510(9), F.A.C.). This comment was previously addressed. **No additional information is required.**

Attachments

jrm

Analytical Results Summary for Leachate Samples Collected at Class I/III/C&D Landfills

Facility Name -- West Pasco Class III Landfill  
 Analytical Laboratory -- Pasco Co Env Lab (inorganics,metals)  
 Flowers Lab (organics,metals)

County -- Pasco  
 Approval of Sampling QA Plan -- Y

Sampling Frequency -- semi-annually  
 Approval of Analytical QA Plan -- Y

PARAMETERS	Ground Water Standard	Leachate Sample Identification Number								Date Sampled	Data Received	Notes
		Tank 1	Tank 2	Tank 1	Tank 2	Tank 1	Tank 2	Tank 1	Tank 2			
		8/4/99	8/4/99	2/25/00	2/25/00	7/25/00	7/25/00	2/27/01	2/27/01			
		9/30/99	9/30/99	7/6/00	7/6/00	9/11/00	9/11/00	5/14/01	5/14/01			
<b>Field Measurements</b>												
pH (Std. Units)	6.5-8.5	6.64	6.85	6.58	6.67	6.41	6.72	6.68	6.68			
Dissolved Oxygen (mg/L)	NE	0.3	3.5	2.4	3.5	1	2.5	0.9	2.5			
Conductivity (µmhos/cm)	NE	1124	208	380	297	698	473	689	660			
<b>Metals/Semimetals</b>												
Antimony (mg/L)	0.006	<0.0002	<0.0002	0.00232	0.00138	<0.0001	<0.0001	<0.001	0.00271			
Arsenic (mg/L)	0.05	0.0235	0.00128	0.0252	0.00372	0.0037	0.00452	0.0479	0.00389			
Cadmium (mg/L)	0.005	0.00006	<0.00005	<0.00005	<0.00005	<0.0001	<0.0001	<0.0001	<0.0001			
Chromium (mg/L)	0.1	0.014	0.00523	0.0165	0.00911	0.00578	0.00404	0.0252	0.00516			
Copper (mg/L)	1	0.00448	0.00543	0.00833	0.00639	<0.0001	0.00204	<0.001	0.00113			
Iron (mg/L)	0.3	0.19	0.22	1.62	4.71	0.42	0.42	0.38	0.5			
Lead (mg/L)	0.15	0.00064	0.00109	0.00114	0.00348	<0.0001	<0.0001	<0.001	<0.001			
Mercury (mg/L)	0.002	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	0.0005	<0.0005	<0.0005			
Selenium (mg/L)	0.05	0.00177	0.00186	0.00114	<0.0007	<0.0001	<0.0001	0.00413	0.00493			
Silver (mg/L)	0.1	0.0009	0.00081	0.00037	0.0016	<0.00005	<0.00005	<0.0005	<0.0005			
Sodium (mg/L)	160	20.8	3.67	40.2	12.2	17.9	8.47	35.9	22.9			
Thallium (mg/L)	0.002	0.00024	<0.0001	0.00116	0.00018	<0.0001	<0.0001	<0.001	<0.001			
Zinc (mg/L)	5	0.0102	0.0192	0.00617	0.00989	<0.0001	<0.0001	0.00717	0.00744			
<b>Inorganics</b>												
Bicarbonate (mg/L)	NE	311	101	170	134	109	124	786	167			
Chlorides (mg/L)	250	49.3	8.34	145	107	3.2	4.4	133	10.24			
Nitrate (mg/L)	10	<0.11	2.08	<0.11	5.28	<0.11	9.89	<0.11	9.91			
Total ammonia (mg/L)	NE	3.88	0.21	2.98	0.3	2.3	0.55	8.57	4.41			
Total Dissolved Solids (mg/L)	500	600	168	302	282	512	424	1670	420			
<b>Organics</b>												
Benzene (µg/L)	1	<0.5	<0.5	<0.801	<0.801	<1	<1	1.06	<1			
Chlorobenzene (µg/L)	100	<0.5	<0.5	<0.449	<0.449	<1	<1	<1	<1			
1,2-dichlorobenzene (µg/L)	600	<0.5	<0.5	<0.674	<0.674	<1	<1	<1	<1			
1,4-dichlorobenzene (µg/L)	75	<0.5	<0.5	<1.19	<1.19	<1	<1	<1	<1			
1,2-dichloroethane (µg/L)	3	<1	<1	<0.642	<0.642	<1	<1	<1	<1			
1,1-dichloroethene (µg/L)	7	<1	<1	<1.7	<1.7	<1	<1	<1	<1			
Ethylbenzene (µg/L)	700	1.04	<0.5	<1.44	<1.44	<1	<1	<1	<1			
Methylene chloride (µg/L)	5	3.33	2.76	1	<0.766	<1	<1	<1	<1			Detected in eq. blk. 8/4/99
Naphthalene (µg/L)	6.8*	<1	<1	<2.82	<2.82	3.05	<1	<1	<1			
Tetrachloroethene (µg/L)	3	<1	<1	<1.46	<1.46	<1	<1	<1	<1			
Vinyl Chloride (µg/L)	1	<0.5	<0.5	<1.46	<1.46	<1	<1	<1	<1			
Appendix II parameters?		No	No	Yes	Yes	No	No	Yes	Yes			

NA = not analyzed

NS = not sampled

GWIS3 RETRIEVAL STATISTICS

6/20/01

Enterprise CI3, Dade City.Pasco Co.  
50 mi Radius well search,1621 Stations  
SURFICIAL AQUIFER SYSTEM

Parameter Description	Meas. Units	No. Station	No. Sample	No. BDLs	Minimum Value	Lower Quartile	Median Value	Upper Quartile	Maximum Value
Depth to Water (from lse)	feet	109	342	12	0.63	5.24	7.535	11.2	46.51
Depth to Water (from mpe)	feet	474	4338	0	-19.66	4.695	6.6304	9.71	137.9
Eh, Field, (hydrogen electrode)	mv	480	2021	0	-264	-19	46.6467	154.575	906
Land Surface Elevation (from mse)	feet	102	961	0	3	18.8	66	112	264.9
Measuring Point Elevation (from mse feet)		403	1632	0	0	18.6175	33.39	74.645	210.29
MicroLanduse Category		350	401	0	0	1	1	2	5
Oxygen, Dissolved, Field	mg/L	449	1621	35	0	0.31	0.7	2.425	11.3
Purge Volume	gal	423	1161	0	1	18.4775	36	74.5295	6780
Specific Conductance, Field	uS/cm	615	5863	0	11	109.4457	390.5	698.5	48800
Water Level Elevation (from mse)	feet	449	3022	12	-21.72	12.03	25.5435	68.59	202.295
Water Temperature	øC	611	5856	0	18	22.8536	24.22	25.27	36.2
pH	s.u.	220	734	0	3.85	5.7	6.7	6.99	10.4
pH, Field	s.u.	551	5105	12	3.67	5.395	6.55	7.02	9.18
Alkalinity, Dissolved (as CaCO3)	mg/L	520	1881	240	0.5	10.4711	110	262.575	1390
Alkalinity, Total (as CaCO3)	mg/L	196	889	4	1	74.016	218.95	287.1717	532
Alkalinity, Total Field (as CaCO3)	mg/L	3	3	0	37	NSD	NSD	NSD	241
Bicarbonate Alkalinity, Diss. (as C mg/L)		112	356	23	1	17.8834	98.6667	244.4167	630
Bicarbonate Alkalinity, Total (as C mg/L)		71	103	4	1.5	6.3	25	96	320
Bicarbonate, Total (as HCO3)	mg/L	132	281	6	0.05	9.85	32.1	127.0861	382.7873
Calcium, Dissolved	mg/L	540	2530	9	0.22	5.8628	42.925	98.7923	563
Calcium, Total	mg/L	303	884	26	0.24	10.04	48.56	105.6556	857
Carbonate Alkalinity, Diss. (as CaC mg/L)		60	73	72	0.05	0.5	1.5	2.525	5
Carbonate Alkalinity, Total (as CaC mg/L)		44	44	37	0	0.5	0.5	0.5	1.5
Carbonate, Total (as CO3)	mg/L	99	106	79	0	0.05	0.05	0.05	70
Chloride, Dissolved	mg/L	541	2532	11	1.3	7.3242	16.5	50.3333	19000
Chloride, Total	mg/L	294	848	3	0.5	9.4	21.675	55.8	8520
Color	Pt-Co	300	347	13	2.5	15	60	150	4500
Fluoride, Dissolved	mg/L	537	2431	1213	0.025	0.05	0.1033	0.25	2.8667
Fluoride, Total	mg/L	295	877	168	0.008	0.0715	0.18	0.3768	2.965
Hardness, Noncarbonate	mg/L	250	785	0	0.8018	6.4724	16.944	48.3181	3705.824
Hardness, Total	mg/L	382	1744	5	0.2	34.9315	178.468	299.9932	3927.77
Magnesium, Dissolved	mg/L	587	3160	77	0.1212	1.3834	3.35	9.4781	1180
Magnesium, Total	mg/L	191	252	3	0.05	1.3725	2.9	7.705	401
Organic Carbon, Dissolved	mg/L	148	160	15	0.5	2.325	6.2	13	75
Organic Carbon, Total	mg/L	578	1644	181	0.05	3.814	10.0625	21	415.15
Oxygen, Dissolved	mg/L	6	6	0	0	0.1	1	3.5	5.2
Potassium, Dissolved	mg/L	540	2528	150	0.0415	0.5958	1.19	3.0927	309.5
Potassium, Total	mg/L	304	885	6	0.01	0.5738	1.175	3.179	601.6
Silicate, Total	mg/L	2	2	0	16	NSD	NSD	NSD	25
Sodium Absorption Ratio		328	1113	0	0.0212	0.3006	0.5465	1.0128	45.6687
Sodium Percent		321	1085	0	0.7308	13.7589	23.5286	38.586	91
Sodium+Potassium	mg/L	318	1086	0	1.485	6.14	12.9575	34.9	6745
Sodium, Dissolved	mg/L	541	2533	1	0.69	4.4189	11.05	34.8	9170
Sodium, Total	mg/L	303	882	2	0.7	5.4	14	35.0469	3730
Specific Conductance	uS/cm	500	738	1	12	91.0833	310	655	30000
Specific Conductance, QA	uS/cm	384	1315	0	20	102	364.3334	676.4286	34400
Sulfate, Dissolved	mg/L	539	2502	283	0.1	1.7667	5.75	22.5	2100
Sulfate, Total	mg/L	296	866	196	0.05	4.225	10	29.85	1050
Sulfide Odor		293	522	0	0	NSD	NSD	2	26.7
Sulfide, Total	mg/L	468	699	363	0.014	0.025	0.069	0.4663	51
Total Dissolved Solids (TDS measure mg/L)		334	1335	1	1.35	99	262.8309	433.5	17700
Total Dissolved Solids (TDS-calculation mg/L)		264	333	0	14	84.8147	266.6227	451.7732	21951
Total Suspended Solids (TSS)	mg/L	17	19	0	8.205	15.6	43.34	105.1	982.4
Turbidity	ntu	527	1243	35	0.05	4.675	16	62.5	4005.5
Turbidity, Field	ntu	35	196	0	0.002	0.64	1.3622	7.3578	231
Turbidity, Lab	ntu	30	31	0	2.4	16	30.25	116	3700

GWIS3 RETRIEVAL STATISTICS

6/20/01

Enterprise CI3, Dade City, Pasco Co.  
50 mi Radius well search, 1621 Stations  
SURFICIAL AQUIFER SYSTEM

Parameter Description	Meas. Units	No. Station	No. Sample	No. BDLS	Minimum Value	Lower Quartile	Median Value	Upper Quartile	Maximum Value
pH, Lab	s.u.	181	232	0	3.87	6.14	6.84	7.18	11.24
Aluminum, Dissolved	ug/L	497	1004	298	7.2	17.5	32	108	13770
Aluminum, Suspended	ug/L	196	218	36	5	21	127.5	732.5	45769
Aluminum, Total	ug/L	447	704	37	10	70	264.5	949	237000
Antimony, Dissolved	ug/L	68	74	48	0.1	0.2	1	1.245	7.6
Antimony, Total	ug/L	292	317	272	0.04	0.1	0.2	0.75	5.5
Arsenic, Dissolved	ug/L	258	318	221	0.005	0.55	1.49	3	30.15
Arsenic, Total	ug/L	561	1403	933	0.3	0.75	1	2.6667	213.3333
Barium, Dissolved	ug/L	499	1084	148	0.25	8.9381	18.7	31.1	131
Barium, Suspended	ug/L	187	206	200	50	50	50	50	408
Barium, Total	ug/L	517	1029	212	0.05	9.845	18	36.8	845.5333
Beryllium, Dissolved	ug/L	258	281	276	0.03	0.1	0.15	0.2	1
Beryllium, Total	ug/L	292	318	300	0.01	0.2	0.25	0.25	4
Cadmium, Dissolved	ug/L	384	550	388	0.0025	0.04	0.1	0.25	31.025
Cadmium, Total	ug/L	546	1218	829	0.01	0.26	0.4475	0.6667	84
Chromium, Dissolved	ug/L	449	814	699	0.005	1.7433	2.5	2.8333	23
Chromium, Suspended	ug/L	63	66	30	0.5	0.5	1	2	82
Chromium, Total	ug/L	565	1462	882	0.1	2.0333	3.8667	6.5	935.7
Cobalt, Dissolved	ug/L	22	22	17	0.2	0.2	0.2	0.2	0.89
Cobalt, Total	ug/L	10	10	8	0.2	0.2	0.2	5	50
Copper, Dissolved	ug/L	503	998	805	0.015	2.3698	3.225	5	839
Copper, Suspended	ug/L	34	36	11	0.5	3	9.5	20	620
Copper, Total	ug/L	564	1471	692	0.1935	2.75	5	9.0625	747.5
Iron, Dissolved	ug/L	589	3105	365	1.5	48.8667	387.5	1417.241	40700
Iron, Suspended	ug/L	311	396	19	0.2	70	292	1500	46100
Iron, Total	ug/L	568	1737	24	5	315	1296.5	4379.167	144717
Lead, Dissolved	ug/L	513	1170	880	0.05	0.3625	0.5	1	2240
Lead, Suspended	ug/L	252	313	32	0.5	1.25	5.25	20.25	7370
Lead, Total	ug/L	563	1464	344	0.05	1.435	5.575	19.3934	3750
Manganese, Dissolved	ug/L	507	1573	304	0.014	5	11.4	27.875	1002.5
Manganese, Suspended	ug/L	178	196	113	0.5	0.5	0.5	3	300
Manganese, Total	ug/L	564	1460	159	0.3	7	14.975	42.425	1349.267
Mercury, Dissolved	ug/L	170	219	207	0.0001	0.0501	0.1	0.1	1.5001
Mercury, Total	ug/L	540	1107	924	0.05	0.05	0.05	0.09	26.025
Nickel, Dissolved	ug/L	482	912	829	0.03	2.515	3.5	5	62
Nickel, Suspended	ug/L	37	37	28	0.5	0.5	0.5	0.5	30
Nickel, Total	ug/L	465	803	686	0.35	3	4.3333	5	51.6667
Selenium, Dissolved	ug/L	205	261	222	0.005	1	1	2	11.6
Selenium, Total	ug/L	501	999	904	0.5	0.5	0.75	2	16
Silver, Dissolved	ug/L	416	687	656	0.015	0.2625	0.5	0.5	3.05
Silver, Suspended	ug/L	23	24	22	0.5	0.5	0.5	0.5	1
Silver, Total	ug/L	518	1007	882	0.02	0.26	0.5	2.1667	25
Strontium, Dissolved	ug/L	588	1796	81	1.5	32.425	238.7857	730	78900
Strontium, Suspended	ug/L	158	172	121	5	5	5	22	1329
Strontium, Total	ug/L	471	806	27	2	37.3167	219	677.3333	78000
Thallium, Dissolved	ug/L	72	78	53	0.01	0.025	0.05	1.5	6
Thallium, Total	ug/L	292	317	263	0.005	0.02	0.025	0.05	12
Vanadium, Dissolved	ug/L	292	319	219	0.2	1	1	2	36
Vanadium, Total	ug/L	292	317	177	0.25	1	2	5	202
Zinc, Dissolved	ug/L	507	1585	797	0.12	4	8	19.9773	3281.667
Zinc, Suspended	ug/L	160	177	117	5	5	5	21.5	14190
Zinc, Total	ug/L	557	1461	411	1	8.5	18	42.3333	25800
Cyanide, Dissolved	mg/L	22	25	25	0.005	0.005	0.005	0.005	0.005
Cyanide, Total	mg/L	180	207	198	0.0025	0.0025	0.005	0.005	0.0233
Ammonia+Organic Nitrogen, Dissolved	mg/L	499	1042	119	0.03	0.215	0.605	1.1292	27
Ammonia, Dissolved (As NH4)	mg/L	184	203	0	0.0258	0.161	0.3542	0.7405	4.8938
Ammonia, Dissolved (as N)	mg/L	574	1771	178	0.0025	0.0542	0.2317	0.51	50

GWIS3 RETRIEVAL STATISTICS

6/20/01

Enterprise CI3, Dade City, Pasco Co.  
50 mi Radius well search, 1621 Stations  
SURFICIAL AQUIFER SYSTEM

Parameter Description	Meas. Units	No. Station	No. Sample	No. BDLS	Minimum Value	Lower Quartile	Median Value	Upper Quartile	Maximum Value	
Ammonia, Total (as N)	mg/L		28	28	6	0.005	0.0625	0.285	0.555	2.4
Nitrate+Nitrite, Dissolved (As NO3)	mg/L		48	66	0	0.13	0.1786	0.4414	1.296	146.2432
Nitrate+Nitrite, Dissolved (as N)	mg/L		539	2472	952	0.002	0.013	0.03	0.1037	30
Nitrate+Nitrite, Total (as N)	mg/L		267	790	210	0.0005	0.0057	0.016	0.05	33.91
Nitrate, Dissolved (as N)	mg/L		27	183	92	0.0109	0.0259	0.0483	0.1775	3.175
Nitrate, Total (as N)	mg/L		153	628	288	0.002	0.0065	0.0172	0.048	6.1112
Nitrate, Total (as NO3)	mg/L		1	4	3	0.045	NSD	NSD	NSD	0.045
Nitrite, Dissolved (as N)	mg/L		20	134	130	0.005	0.01	0.01	0.01	0.0167
Nitrite, Total (as N)	mg/L		116	635	421	0.002	0.0023	0.0039	0.008	0.1993
Nitrogen, Dissolved	mg/L		118	129	0	0.24	0.65	1.005	2.24	34
Organic Nitrogen, Dissolved	mg/L		193	213	13	0.1	0.28	0.41	0.73	4.46
Orthophosphate, Dissolved (as P)	mg/L		547	1733	330	0.002	0.012	0.036	0.115	9.9
Orthophosphate, Dissolved (as PO4)	mg/L		1	1	0	0.092	NSD	NSD	NSD	0.092
Orthophosphate, Total (as P)	mg/L		101	118	26	0.0025	0.0433	0.104	0.277	1.815
Phosphate, Total	mg/L		81	91	5	0.0015	0.042	0.118	0.348	1.39
Phosphorus, Dissolved (as P)	mg/L		520	1176	100	0.002	0.0223	0.0512	0.13	111
Phosphorus, Total (as P)	mg/L		68	219	27	0.005	0.0413	0.0506	0.1152	1.4498
Silica, Dissolved	mg/L		580	1756	7	0.5	5.225	8.8834	15.5	88
1,1,1-Trichloroethane	ug/L		477	1201	1194	0.25	0.25	0.25	0.93	1850.125
1,1,1,2-Tetrachloroethane	ug/L		473	1213	1211	0.25	0.25	0.25	1.25	64.125
1,1,2-Trichloroethane	ug/L		479	1227	1226	0.25	0.25	0.25	0.5025	8.5833
1,1-Dichloroethane	ug/L		479	1245	1240	0.25	0.25	0.25	0.645	1600.125
1,1-Dichloroethene	ug/L		479	1245	1242	0.25	0.25	0.25	0.6525	9.625
1,1-Dichloropropane	ug/L		22	25	25	0.25	0.25	0.25	0.25	0.25
1,2-Dibromo-3-chloropropane (DBCP)	ug/L		39	43	43	0.01	0.01	0.01	0.02	0.5
1,2-Dibromoethane (EDB)	ug/L		198	498	498	0.0025	0.25	2.5	2.5	2.5
1,2-Dichlorobenzene	ug/L		473	1251	1247	0.25	0.25	0.3333	2.625	8.5833
1,2-Dichloroethane	ug/L		479	1245	1244	0.25	0.25	0.25	0.505	8.5833
1,2-Dichloroethene (cis)	ug/L		142	412	412	0.25	2.5	2.5	2.5	2.5
1,2-Dichloroethene (trans)	ug/L		479	1219	1219	0.25	0.25	0.25	0.5	8.5833
1,2-Dichloropropane	ug/L		479	1245	1241	0.25	0.25	0.25	0.625	8.5833
1,3-Dichlorobenzene	ug/L		467	1227	1227	0.25	0.25	0.3125	2.625	8.5833
1,3-Dichloropropene	ug/L		155	350	350	0.25	0.25	0.25	0.25	10
1,3-Dichloropropene (cis)	ug/L		460	1067	1067	0.25	0.25	0.25	1.6719	12.75
1,3-Dichloropropene (trans)	ug/L		460	1069	1069	0.25	0.25	0.25	1.5921	8.5833
1,4-Dichlorobenzene	ug/L		467	1227	1218	0.25	0.25	0.3125	2.625	8.5833
2,4,5-TP (Silvex)	ug/L		69	71	71	0.001	0.001	0.001	0.001	0.025
2,4-D	ug/L		89	95	93	0.0025	0.0025	0.0025	0.05	3.69
2,4-DB	ug/L		22	25	25	0.5	0.5	0.5	0.5	0.5
2-Chloroethylvinyl ether	ug/L		479	1244	1244	0.25	0.25	0.25	0.75	8.5833
2378-Tetrachlorodibenzo-P-Dioxin (T)	ug/L		7	7	7	5	5	5	5	5
3-Hydroxycarbofuran	ug/L		296	335	335	0.5	1	1	1	2.5
Acrolein	ug/L		45	45	45	0.5	0.5	12.5	12.5	25
Acrylonitrile	ug/L		45	45	45	0.5	0.5	12.5	12.5	25
Alachlor	ug/L		307	356	356	0.075	0.145	0.145	0.145	0.5
Aldicarb	ug/L		306	356	356	0.1	1	1	1	3
Aldicarb sulfone	ug/L		296	335	335	0.25	1	1	1	2.5
Aldicarb sulfoxide	ug/L		295	334	334	0.25	1	1	1	2.5
Aldrin	ug/L		325	419	419	0.002	0.0048	0.0048	0.0049	5
Ametryne	ug/L		1	1	1	0.015	NSD	NSD	NSD	0.015
Atrazine	ug/L		307	357	355	0.0133	0.024	0.024	0.0249	0.39
BHC, Alpha	ug/L		302	387	387	0.0047	0.0048	0.0048	0.0049	3.335
BHC, Beta	ug/L		302	361	361	0.0042	0.0048	0.0048	0.0052	2.1683
BHC, Delta	ug/L		302	361	361	0.0038	0.0048	0.0048	0.0049	2.1683
BHC, Gamma (Lindane)	ug/L		328	449	449	0.0003	0.0048	0.0048	0.0049	3.335
Benfluralin	ug/L		22	25	25	0.002	0.005	0.005	0.005	0.005
Benzene	ug/L		473	1221	1213	0.25	0.25	0.25	0.5	8.5833

GWIS3 RETRIEVAL STATISTICS

6/20/01

Enterprise CI3, Dade City.Pasco Co.  
50 mi Radius well search,1621 Stations  
SURFICIAL AQUIFER SYSTEM

Parameter Description	Meas. Units	No. Station	No. Sample	No. BDLS	Minimum Value	Lower Quartile	Median Value	Upper Quartile	Maximum Value
Bromacil	ug/L	307	356	343	0.073	0.145	0.145	0.15	67
Bromodichloromethane	ug/L	479	1245	1245	0.25	0.25	0.25	0.5	8.5833
Bromoform	ug/L	479	1249	1249	0.25	0.25	0.25	0.5	8.5833
Bromomethane	ug/L	409	942	942	0.25	0.25	0.375	1.9375	12.75
Captan	ug/L	1	1	1	0.005	NSD	NSD	NSD	0.005
Carbaryl	ug/L	296	335	335	0.5	1	1	1	2.5
Carbofuran	ug/L	306	359	353	0.5	1	1	1	12.8
Carbon tetrachloride	ug/L	479	1245	1245	0.25	0.25	0.25	0.5	8.5833
Carbophenothion (Trithion)	ug/L	1	1	1	0.01	NSD	NSD	NSD	0.01
Chlordane	ug/L	329	411	411	0.005	0.05	0.095	0.095	5.025
Chlorobenzene	ug/L	479	1245	1242	0.25	0.25	0.25	0.6437	8.5833
Chlorobenzilate	ug/L	295	334	334	0.0235	0.024	0.024	0.0245	0.1
Chloroethane	ug/L	479	1245	1245	0.25	0.25	0.25	0.5	8.5833
Chloroform	ug/L	479	1245	1232	0.25	0.25	0.3125	1.325	8.5833
Chloromethane	ug/L	479	1245	1244	0.25	0.25	0.3125	0.75	8.5833
Chloropicrin	ug/L	37	40	40	0.001	0.001	0.005	0.005	0.005
Chlorothalonil (Bravo)	ug/L	22	25	25	0.001	0.01	0.01	0.01	0.01
Chlorotoluene	ug/L	31	34	34	0.25	0.25	0.25	0.25	0.5
Chlorpyrifos	ug/L	298	337	337	0.005	0.0475	0.0478	0.0485	0.06
DDD (p,p')	ug/L	329	438	438	0.005	0.0095	0.0095	0.01	2.505
DDE (p,p')	ug/L	329	438	438	0.002	0.0095	0.0095	0.01	5.27
DDT (p,p')	ug/L	329	450	450	0.005	0.0098	0.0145	0.0145	2.675
Dacthal (DCPA)	ug/L	15	15	15	0.025	0.25	0.25	0.25	0.25
Demeton	ug/L	7	7	7	0.5	0.5	0.5	0.5	0.5
Diazinon	ug/L	302	350	344	0.005	0.0475	0.0479	0.0485	1.8
Dibromochloromethane	ug/L	479	1245	1245	0.25	0.25	0.25	0.5	8.5833
Dicamba	ug/L	22	25	25	2.5	2.5	2.5	2.5	2.5
Dichloran	ug/L	1	1	1	0.002	NSD	NSD	NSD	0.002
Dichlorobenzene	ug/L	119	384	384	0.5	2.5	2.5	2.5	2.5
Dichlorodifluoromethane	ug/L	283	614	614	0.25	0.5	0.5	2.5	5
Dicofol (Kelthane)	ug/L	22	25	25	0.005	0.01	0.01	0.01	0.01
Dieldrin	ug/L	329	449	449	0.001	0.0095	0.0095	0.01	2.67
Disulfoton	ug/L	298	337	337	0.025	0.07	0.07	0.075	0.09
Diuron	ug/L	307	360	353	0.0045	0.2	0.2	0.2	15.2
Endosulfan I	ug/L	329	428	428	0.0047	0.0073	0.0095	0.0095	4.0033
Endosulfan II	ug/L	302	370	370	0.0047	0.0095	0.0095	0.01	4.0083
Endosulfan sulfate	ug/L	302	378	369	0.0095	0.0095	0.0095	0.01	2.7625
Endrin	ug/L	330	410	410	0.0005	0.0123	0.024	0.0243	6
Endrin aldehyde	ug/L	302	354	354	0.0095	0.0145	0.0145	0.0145	5.5
Ethion	ug/L	298	337	337	0.0192	0.024	0.024	0.0245	0.03
Ethoprop	ug/L	307	357	355	0.005	0.0475	0.0475	0.0485	0.7877
Ethyl Parathion	ug/L	66	67	67	0.0045	0.005	0.005	0.005	0.035
Ethylbenzene	ug/L	473	1221	1216	0.25	0.25	0.25	1.75	500
Fenamiphos	ug/L	307	357	356	0.005	0.145	0.145	0.145	0.25
Heptachlor	ug/L	329	412	412	0.0015	0.0048	0.0048	0.0049	5
Heptachlor epoxide	ug/L	329	413	412	0.0047	0.0095	0.0095	0.0115	5
Hexazinone	ug/L	307	356	351	0.05	0.095	0.095	0.1	1.3
Imidacloprid	ug/L	278	311	311	0.2	0.2	0.2	0.2	0.2
Iprodione	ug/L	278	311	311	0.375	0.38	0.385	0.39	0.48
Isodrin	ug/L	276	310	310	0.0073	0.0095	0.0095	0.0095	0.012
Isofenphos	ug/L	298	337	337	0.0382	0.0475	0.048	0.049	0.1
Linuron	ug/L	278	311	311	0.2	0.2	0.2	0.2	0.2
Malathion	ug/L	284	323	323	0.005	0.07	0.07	0.075	0.1
Metalaxyl	ug/L	299	338	337	0.25	0.285	0.29	0.295	4.7
Metam Sodium	ug/L	15	15	15	1.5	1.5	1.5	1.5	1.5
Methamidophos	ug/L	22	25	25	0.045	1	1	1	1
Methomyl	ug/L	306	575	574	0.5	1	1	1	24.75

GWIS3 RETRIEVAL STATISTICS

6/20/01

Enterprise CI3, Dade City, Pasco Co.  
50 mi Radius well search, 1621 Stations  
SURFICIAL AQUIFER SYSTEM

Parameter Description	Meas. Units	No. Station	No. Sample	No. BDLS	Minimum Value	Lower Quartile	Median Value	Upper Quartile	Maximum Value
Methoxychlor	ug/L	311	384	384	0.005	0.0238	0.024	0.0245	0.0878
Methyl Azinphos (Guthion)	ug/L	283	322	322	0.08	0.095	0.095	0.0975	1
Methyl Parathion	ug/L	298	338	338	0.025	0.0475	0.0478	0.0485	0.06
Methyl tert-Butyl Ether (MTBE)	ug/L	31	34	34	0.25	0.25	0.25	0.5	5
Methylene chloride	ug/L	479	1245	1242	0.25	0.25	0.25	0.8	8.5833
Methylisothiocyanate (MITC)	ug/L	22	25	25	37.5	37.5	37.5	37.5	37.5
Metolachlor	ug/L	278	311	311	0.235	0.24	0.24	0.245	0.3
Metribuzin	ug/L	307	356	356	0.0025	0.095	0.095	0.1	0.25
Mevinphos	ug/L	298	337	337	0.005	0.12	0.12	0.12	0.15
Mirex	ug/L	66	67	67	0.0005	0.0005	0.0005	0.0005	0.015
Naled	ug/L	298	337	337	0.05	0.38	0.3825	0.39	0.48
Norflurazon	ug/L	298	337	334	0.1283	0.145	0.145	0.145	3.2
Oxamyl	ug/L	306	359	359	0.5	1	1	1	6.1
PCNB	ug/L	276	310	310	0.0067	0.0095	0.0095	0.0095	0.012
Pendimethalin	ug/L	22	25	25	0.005	1	1	1	1
Permethrin	ug/L	22	25	25	0.1	0.5	0.5	0.5	0.5
Perthane	ug/L	1	1	1	0.1	NSD	NSD	NSD	0.1
Phorate	æg/L	278	311	311	0.0465	0.0475	0.048	0.0485	0.06
Picloram	ug/L	22	25	25	0.01	0.01	0.01	0.01	0.01
Prometon	ug/L	218	246	246	0.08	0.095	0.095	0.095	0.12
Prometryn	ug/L	298	337	337	0.0382	0.0475	0.048	0.049	0.5
Propazine	ug/L	21	22	17	0.0325	0.05	0.05	0.05	0.37
Propoxur	ug/L	296	352	351	0.5	1	1	1	3.75
Simazine	ug/L	307	357	355	0.0145	0.024	0.024	0.025	0.66
Strobane	ug/L	1	1	1	0.25	NSD	NSD	NSD	0.25
Styrene	ug/L	38	40	40	0.25	0.25	0.25	0.5	2.5
Tebuthiuron (GRASLAN, SPIKE)	ug/L	218	245	245	0.465	0.475	0.48	0.485	0.6
Terbufos	ug/L	298	337	337	0.05	0.07	0.07	0.075	0.25
Terbutylazine	ug/L	1	1	1	0.1	NSD	NSD	NSD	0.1
Terbutryn	ug/L	1	1	1	0.025	NSD	NSD	NSD	0.025
Tetrachloroethene	ug/L	479	1271	1270	0.25	0.25	0.25	0.625	8.5833
Toluene	ug/L	473	1223	1167	0.25	0.25	0.3125	1.375	45.3725
Toxaphene	ug/L	330	418	418	0.0375	0.355	0.355	0.365	366.6667
Triademefon	ug/L	298	337	337	0.1133	0.12	0.12	0.125	0.5
Trichloroethene	ug/L	479	1227	1226	0.25	0.25	0.25	0.5275	8.5833
Trichlorofluoromethane	ug/L	452	1088	1077	0.25	0.25	0.3417	1.5679	8.5833
Trifluralin	ug/L	22	25	25	0.005	0.005	0.005	0.005	0.005
Trimethylbenzene	ug/L	7	7	7	2.5	2.5	2.5	2.5	2.5
Vinyl Chloride	ug/L	479	1245	1228	0.25	0.25	0.25	1.3929	8.5833
Xylenes	ug/L	403	695	680	0.25	0.25	0.25	0.25	12.625

NOTE: Data from different water bodies were treated as separate averages from upper and lower quartiles estimated for

re analyzed separately. Values below detection limit were averaged. Upper and lower quartiles (Hollander, Mosteller, Tukey 1983)



Florida Department of  
**Environmental Protection**

**Memorandum**

**TO:** Kim Ford, P.E.  
**FROM:** John R. Morris, P.G. *JRM*  
**DATE:** June 28, 2001  
**SUBJECT:** Proposed Enterprise Recycling and Disposal Class III Landfill  
Pending Permit Nos. 177982-001-SC and 177982-002-SO  
Hydrogeologic and Monitoring Review Comments  
**cc:** *of for* Robert Butera, P.E.

I have reviewed the following submittals in support of the permit application for the referenced facility that were provided in response to the Department's letter requesting additional information dated May 2, 2001:

3. *Request for Additional Information, Dated May 2, 2001, Sid Larkin & Son, Inc., Enterprise Recycling and Disposal Facility, Class III Landfill, Pasco County, Florida*, prepared by Hartman & Associates, Inc. (HAI), dated May 18, 2001, received May 21, 2001;
4. *Addendum to Response to Request for Additional Information, Dated May 2, 2001, Sid Larkin & Son, Inc., Enterprise Recycling and Disposal Facility, Class III Landfill, Pasco County, Florida*, prepared by HAI, dated May 31, 2001, received June 1, 2001; and,
5. *Correction to May 29, 2001 Submittal*, prepared by HAI, dated June 7, 2001, received via facsimile June 7, 2001.

My review focused on the hydrogeologic and monitoring aspects of the proposed landfill. The comment numbers presented herein are consistent with my memoranda dated January 10, and May 1, 2001, and also reference the above-mentioned submittal numbers. Those comments which have been resolved by these or previously received submittals include the notation: "No additional information is required." However, several comments (presented below in *italics*) have not been fully addressed and the submitted information is considered **not sufficient** to support the description of site hydrogeology and the proposed monitoring program for the proposed Enterprise Class III landfill and does not demonstrate compliance with Rules 62-701.410 and 62-701.510, F.A.C., respectively.

**KIM FORD'S REVIEW COMMENTS**

**Part B - Disposal Facility General Information**

1. B.21., B.22., B.24., and B.25. It is noted that revisions to Chapter 62-701, F.A.C., effective May 27, 2001, change the rule citations for Class III wastes and landfills. The definition of Class III wastes is presented in Rule 62-701.200(14), F.A.C., and the exemption language is presented in Rule 62-701.340(3)(c), F.A.C. It is also noted that the revised rule indicates that it is the applicant who demonstrates that no significant threat to the environment will result from the requested exemption.

Submittal 3 includes statements regarding the applicability of the requested exemption from liner and leachate collection requirements at the subject facility. The following comments address several of these statements:

- a. It is indicated that the Department's publication entitled *Florida Class III Lined Landfill Leachate Data Summary Report*, dated May 18, 2000, includes average concentrations for leachate constituents which are not representative of actual concentrations. Richard Tedder, FDEP Tallahassee at (850) 488-0300, should be contacted to obtain revised leachate average concentrations that include the results for non-detects.

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*Printed on recycled paper.*

- b. It is indicated that the leachate data for the West Pasco Class III landfill does not exceed FDEP standards or guidance concentrations, with the exception of mercury. The attached table provides a summary of leachate samples collected at the West Pasco Class III landfill for the period from August 1999 to February 2001. It is noted that exceedances of ground water standards were reported for the following sampling events: August 1999 – total dissolved solids; February 2000 – iron; July 2000 – pH, iron, and total dissolved solids; February 2001 – iron, total dissolved solids, and benzene.
- c. It is indicated that the Cedar Trail Class III landfill has a similar clay layer and has not experienced any significant ground water exceedances. It is noted that site hydrogeology and the consistency of the emplaced phosphatic clay slimes at the Cedar Trail Class III landfill is considered to be dissimilar to the laterally and vertically variable native sandy clay and clay sediments at the proposed Enterprise Class III landfill. It is also noted that persistent exceedances of standards have been reported for one of the detection wells at Cedar Trail Class III that are not considered to be “naturally occurring”.

Submittal 4 includes calculations of dilution for potential pollutants based on rainfall from the upgradient ground water basin from west to east across the site. The following comments address the dilution approach:

- d. It is understood that the area of the region upgradient of Cells 1 and 2 that contribute ground water ( $A_u$ ) was based on topography from quadrangle maps for the vicinity of the subject property. Documentation of the area upgradient of Cells 1 and 2 was not included in the submittal for review.
- e. The difference in effective porosity between native soils and emplaced wastes is not addressed in the dilution calculation.
- f. The seasonal variability in hydraulic gradient and direction of ground water flow is not addressed in the dilution calculation.
- g. The assumption that all potential pollutants are not present in background ( $C_b$ ) is not considered to be valid. The attached table presents water quality data for surficial aquifer wells located within 50 miles of Dade City that are considered to be more representative of background conditions.

It is noted that Department technical staff do not consider the dilution equation and the associated assumptions to adequately describe the transient nature of the surficial aquifer at the subject property. A more detailed analytical solution or a numerical model would be required to characterize potential impacts to ground water quality. However, given the other assurances provided in Submittal 3 regarding control of unauthorized wastes, site hydrogeology, stormwater control, ground water monitoring, and cell certification, the Department is not requesting a more comprehensive demonstration of potential ground water quality impacts in the surficial aquifer for the proposed Enterprise Class III landfill, at this time.

#### JOHN MORRIS' REVIEW COMMENTS

##### **Part G – Landfill Construction Requirements (Rule 62-701.400, F.A.C.)**

- 1. G.9.a. – Gas Control System. This comment was previously addressed. **No additional information is required.**
- 2. G.9.d. – Gas Monitoring Program (Rule 62-701.400(10)(c), F.A.C.)
  - a. The revised Gas Monitoring Survey Form presented in Submittal 3 is noted. **No additional information is required.**
  - b. This comment was previously addressed. **No additional information is required.**

**Part H – Hydrogeological Investigation Requirements (Rule 62-701.410, F.A.C.)**

**3. H.1.b. – Rate and Direction of Ground Water Flow (Rule 62-701.410(1)(a)1, F.A.C.).**

- a. The responses provided in Submittal 3 that the inferred contours are not based on actual water level measurements and that the four water level measurement events conducted at the subject property are considered to be representative of seasonal fluctuations are noted. **No additional information is required.**
- b. Please respond to the following comments provided regarding the response:
  - i. *The response provided in Submittal 3 does not appear to address the response to comment No. 8.e., regarding the occurrence of ground water relative to the top of limestone. It is noted that the elevations reported for P-5 appear to fit on both Figures 11.1 and 14.1, and it is not clear which unit(s) is monitored by P-5.*
  - ii. *The boring log provided for P-10B (Submittal 3, Appendix 5-A) indicates the boring was completed 55 feet below land surface, while the well completion log for P-10 (Submittal 2, Appendix 5-A) indicates the piezometer was installed to a depth of 75 feet below land surface. It has not been demonstrated what zone is monitored at this location.*
  - iii. It is noted that the response provided in Submittal 3 indicates a land surface elevation at P-10 (+129 ft NGVD) that differs from the elevation shown on Figure 11.1. **No additional information is required.**
  - iv. The boring log provided for P-11B (Submittal 3, Appendix 5-A) is noted. **No additional information is required.**
  - v. The revision to Figure 6.2 (Submittal 3) is noted. **No additional information is required.**
  - vi. *The revision to the boring log for P-12 (Submittal 3, Appendix 5-A) appears to be inappropriate. The documentation from Universal Engineering Services (UES) regarding the indicated confirmation that the description of “clayey silt with limerock” is analogous to limestone has not been provided. It is also noted that the modification provided to the boring log for P-12 has changed the soil encountered at a depth of 8 feet below land surface described as “yell brn clay sand/sandy cl” to limestone.*
  - vii. *The revision to the boring log provided for P-1A (Submittal 3, Appendix 5-A) is noted. The documentation from UES regarding the indicated confirmation that the description of “clayey silt with limerock” is analogous to limestone has not been provided.*
  - viii. *The discussion provided in Submittal 3 regarding anomalous ground water elevations at P-11 is noted. It is also noted that the potentiometric surface contour map provided for water levels measured on May 8, 2001 (Submittal 3, Figure 14.2) incorrectly includes the ground water elevation at P-3A. Revision of Figure 14.2 to exclude data from P-3A will cause substantial changes to the direction of ground water flow.*
- c. This comment was previously addressed. **No additional information is required.**
- d. The revisions of slug test analyses for P-2 (slug out), P-3 (slug out), P-3a (slug in), and P-7 (slug out) are noted. Please respond to the following comments provided regarding the slug tests:
  - i. The response provided in Submittal 3 regarding the time scale for the slug in test at P-3 is noted. **No additional information is required.**
  - ii. The responses provided in Submittal 3 regarding the slug in tests at P-3 and P-7 are noted. **No additional information is required.**
- e. The response provided in Submittal 3 regarding the slug out test at P-5 is noted. **No additional information is required.**

- f. The responses provided regarding the results of the slug tests are noted. Please address the following comments:
    - i. The response provided in Submittal 3 indicating an arithmetic mean will be used to average hydraulic conductivity values is noted. **No additional information is required.**
    - ii. The response provided in Submittal 3 indicating that Section 5.2.2 and Table 5-2 of the Hydrogeological Investigation have been revised to reflect the slug test results provided in Submittal 1 is noted. **No additional information is required.**
  - g. This comment was previously addressed. **No additional information is required.**
  - h. This comment was previously addressed. **No additional information is required.**
  - i. This comment was previously addressed. **No additional information is required.**
  - j. The revision to the ground water velocity calculation provided in Submittal 3 (Section 5.2.2 of the Hydrogeological Investigation) is noted. **No additional information is required.**
4. H.1.c. – Background Water Quality (Rule 62-701.410(1)(a)2., F.A.C.). This comment was previously addressed. **No additional information is required.**
5. H.1.e. – Site Stratigraphy (Rule 62-701.410(1)(a)4., F.A.C.).
- a. The response provided in Submittal 3 that individual boring logs for L-12 through L-17 are not available is noted. **No additional information is required.**
  - b. The response provided in Submittal 3 that all geological work was supervised by Mr. James Golden, P.G., is noted. **No additional information is required.**
  - c. The response that revised geological cross sections (Figures 5, 6, 6.1 and 6.2) have been provided to distinguish between the clayey sand and sandy clay/clay sediments and that a consistent sandy clay layer underlies the site is noted. Please respond to the comments provided regarding the revised cross sections:
    - i. The response provided in Submittal 3 describing the variability between borings L-13 and DCL01-9 is noted. **No additional information is required.**
    - ii. The response provided in Submittal 3 describing the revision to Figure 5 depicting the sandy clay/clay layer at boring B-7 and adjacent borings DCL01-9/L-13 is noted. **No additional information is required.**
    - iii. The response provided in Submittal 3 describing the revision to Figure 5 depicting the top of limestone at boring DCL01-11 is noted. **No additional information is required.**
    - iv. The response provided in Submittal 3 describing the revision to Figure 6 depicting the land surface elevation at boring B-2 is noted. **No additional information is required.**
    - v. The response provided in Submittal 3 describing the revision to Figure 6 depicting the sandy clay layer at boring B-8 is noted. **No additional information is required.**
    - vi. The response provided in Submittal 3 describing the revision to Figure 6.1 depicting the interpolated occurrence of limestone at boring B-15 is noted. **No additional information is required.**
    - vii. The response provided in Submittal 3 describing the revision to Figure 6.1 depicting the sandy clay layer at boring log DCL01-1 is noted. **No additional information is required.**
    - viii. The response provided in Submittal 3 describing the procedures to be implemented to ensure that the sandy clay/clay layer in the vicinity of boring DCL01-1 will not be breached is noted. **No additional information is required.**

- ix. The response provided in Submittal 3 indicating that the revisions to Figure 6.2 reflect review comments Nos. 3.b.ii. through 3.b.v., is noted. **No additional information is required.**
  - d. This comment was previously addressed. **No additional information is required.**
  - e. This comment was previously addressed. **No additional information is required.**
6. H.1.g/H.1.i -- Inventory of Public and Private Wells (Rule 62-701.410(1)(b), F.A.C.). This comment was previously addressed. **No additional information is required.**

**Part I – Geotechnical Investigation (Rule 62-701.420, F.A.C.)**

7. I.1.b. – Lineaments (Rule 62-701.410(2)(b), F.A.C.). This comment was previously addressed. **No additional information is required.**

**Part L – Water Quality and Leachate Monitoring (Rule 62-701.510, F.A.C.)**

8. L.1.c – Ground Water Monitoring (Rule 62-701.510(3), F.A.C.).
- a. The response provided in Submittal 3 indicating when proposed wells MW-1A and MW-14 will be installed and the revision to Section 5.3.1 of the Hydrogeological Investigation is noted. **No additional information is required.**
  - b. This comment was previously addressed. **No additional information is required.**
  - c. This comment was previously addressed. **No additional information is required.**
  - d. The response provided in Submittal 3 indicating that Section 5.3.2.2 of the Hydrogeological Investigation has been revised to clarify the source of historical ground water level data is noted. **No additional information is required.**
  - e. The response provided in Submittal 3 indicating that Section 5.3.2.2 and Figure 17 have been revised to reflect construction of the Floridan monitor wells with 10 or 15 feet of screen is noted. **No additional information is required.**
  - f. This comment was previously addressed. **No additional information is required.**
9. L.1.f. – Routine Sampling Frequency (Rule 62-701.510(6), F.A.C.).
- a. The response provided in Submittal 3 indicating that Section 5.4.2 of the Hydrogeological Investigation has been revised to reflect the staggered schedule of monitor well installation is noted. **No additional information is required.**
  - b. This comment was previously addressed. **No additional information is required.**
  - c. This comment was previously addressed. **No additional information is required.**
10. L.1.h. – Water Quality Monitoring Reports (Rule 62-701.510(9), F.A.C.). This comment was previously addressed. **No additional information is required.**

Attachments

jrm

Analytical Results Summary for Leachate Samples Collected at Class I/III/C&D Landfills

Facility Name -- West Pasco Class III Landfill  
 Analytical Laboratory -- Pasco Co Env Lab (inorganics,metals)  
 Flowers Lab (organics,metals)

County -- Pasco  
 Approval of Sampling QA Plan -- Y

Sampling Frequency -- semi-annually  
 Approval of Analytical QA Plan -- Y

PARAMETERS	Ground Water Standard	Leachate Sample Identification Number										Date Sampled	Data Received	Notes
		Tank 1	Tank 2	Tank 1	Tank 2	Tank 1	Tank 2	Tank 1	Tank 2	Tank 1	Tank 2			
		8/4/99	8/4/99	2/25/00	2/25/00	7/25/00	7/25/00	2/27/01	2/27/01					
<b>Field Measurements</b>														
pH (Std. Units)	6.5-8.5	6.64	6.85	6.58	6.67	6.41	6.72	6.68	6.68					
Dissolved Oxygen (mg/L)	NE	0.3	3.5	2.4	3.5	1	2.5	0.9	2.5					
Conductivity (µmhos/cm)	NE	1124	208	380	297	698	473	689	660					
<b>Metals/Semimetals</b>														
Antimony (mg/L)	0.006	<0.0002	<0.0002	0.00232	0.00138	<0.0001	<0.0001	<0.001	0.00271					
Arsenic (mg/L)	0.05	0.0235	0.00128	0.0252	0.00372	0.0037	0.00452	0.0479	0.00389					
Cadmium (mg/L)	0.005	0.00006	<0.00005	<0.00005	<0.00005	<0.0001	<0.0001	<0.0001	<0.0001					
Chromium (mg/L)	0.1	0.014	0.00523	0.0165	0.00911	0.00578	0.00404	0.0252	0.00516					
Copper (mg/L)	1	0.00448	0.00543	0.00833	0.00639	<0.0001	0.00204	<0.001	0.00113					
Iron (mg/L)	0.3	0.19	0.22	1.62	4.71	0.42	0.42	0.38	0.5					
Lead (mg/L)	0.15	0.00064	0.00109	0.00114	0.00348	<0.0001	<0.0001	<0.001	<0.001					
Mercury (mg/L)	0.002	<0.0002	<0.0002	<0.0002	<0.0002	0.0006	0.0005	<0.0005	<0.0005					
Selenium (mg/L)	0.05	0.00177	0.00186	0.00114	<0.0007	<0.0001	<0.0001	0.00413	0.00493					
Silver (mg/L)	0.1	0.0009	0.00081	0.00037	0.0016	<0.00005	<0.00005	<0.0005	<0.0005					
Sodium (mg/L)	160	20.8	3.67	40.2	12.2	17.9	8.47	35.9	22.9					
Thallium (mg/L)	0.002	0.00024	<0.0001	0.00116	0.00018	<0.0001	<0.0001	<0.001	<0.001					
Zinc (mg/L)	5	0.0102	0.0192	0.00617	0.00989	<0.0001	<0.0001	0.00717	0.00744					
<b>Inorganics</b>														
Bicarbonate (mg/L)	NE	311	101	170	134	109	124	786	167					
Chlorides (mg/L)	250	49.3	8.34	145	107	3.2	4.4	133	10.24					
Nitrate (mg/L)	10	<0.11	2.08	<0.11	5.28	<0.11	9.89	<0.11	9.91					
Total ammonia (mg/L)	NE	3.88	0.21	2.98	0.3	2.3	0.55	8.57	4.41					
Total Dissolved Solids (mg/L)	500	600	168	302	282	512	424	1670	420					
<b>Organics</b>														
Benzene (µg/L)	1	<0.5	<0.5	<0.801	<0.801	<1	<1	1.06	<1					
Chlorobenzene (µg/L)	100	<0.5	<0.5	<0.449	<0.449	<1	<1	<1	<1					
1,2-dichlorobenzene (µg/L)	600	<0.5	<0.5	<0.674	<0.674	<1	<1	<1	<1					
1,4-dichlorobenzene (µg/L)	75	<0.5	<0.5	<1.19	<1.19	<1	<1	<1	<1					
1,2-dichloroethane (µg/L)	3	<1	<1	<0.642	<0.642	<1	<1	<1	<1					
1,1-dichloroethene (µg/L)	7	<1	<1	<1.7	<1.7	<1	<1	<1	<1					
Ethylbenzene (µg/L)	700	1.04	<0.5	<1.44	<1.44	<1	<1	<1	<1					
Methylene chloride (µg/L)	5	3.33	2.76	1	<0.766	<1	<1	<1	<1					Detected in eq. blk. 8/4/99
Naphthalene (µg/L)	6.8*	<1	<1	<2.82	<2.82	3.05	<1	<1	<1					
Tetrachloroethene (µg/L)	3	<1	<1	<1.46	<1.46	<1	<1	<1	<1					
Vinyl Chloride (µg/L)	1	<0.5	<0.5	<1.46	<1.46	<1	<1	<1	<1					
Appendix II parameters?		No	No	Yes	Yes	No	No	Yes	Yes					

NA = not analyzed

NS = not sampled

GWIS3 RETRIEVAL STATISTICS

6/20/01

Enterprise CI3, Dade City.Pasco Co.  
50 mi Radius well search,1621 Stations  
SURFICIAL AQUIFER SYSTEM

Parameter Description	Meas. Units	No. Station	No. Sample	No. BDLS	Minimum Value	Lower Quartile	Median Value	Upper Quartile	Maximum Value
Depth to Water (from lse)	feet	109	342	12	0.63	5.24	7.535	11.2	46.51
Depth to Water (from mpe)	feet	474	4338	0	-19.66	4.695	6.6304	9.71	137.9
Eh, Field, (hydrogen electrode)	mv	480	2021	0	-264	-19	46.6467	154.575	906
Land Surface Elevation (from mse)	feet	102	961	0	3	18.8	66	112	264.9
Measuring Point Elevation (from mse feet)		403	1632	0	0	18.6175	33.39	74.645	210.29
MicroLanduse Category		350	401	0	0	1	1	2	5
Oxygen, Dissolved, Field	mg/L	449	1621	35	0	0.31	0.7	2.425	11.3
Purge Volume	gal	423	1161	0	1	18.4775	36	74.5295	6780
Specific Conductance, Field	uS/cm	615	5863	0	11	109.4457	390.5	698.5	48800
Water Level Elevation (from mse)	feet	449	3022	12	-21.72	12.03	25.5435	68.59	202.295
Water Temperature	øC	611	5856	0	18	22.8536	24.22	25.27	36.2
pH	s.u.	220	734	0	3.85	5.7	6.7	6.99	10.4
pH, Field	s.u.	551	5105	12	3.67	5.395	6.55	7.02	9.18
Alkalinity, Dissolved (as CaCO3)	mg/L	520	1881	240	0.5	10.4711	110	262.575	1390
Alkalinity, Total (as CaCO3)	mg/L	196	889	4	1	74.016	218.95	287.1717	532
Alkalinity, Total Field (as CaCO3)	mg/L	3	3	0	37	NSD	NSD	NSD	241
Bicarbonate Alkalinity, Diss. (as C mg/L)		112	356	23	1	17.8834	98.6667	244.4167	630
Bicarbonate Alkalinity, Total (as C mg/L)		71	103	4	1.5	6.3	25	96	320
Bicarbonate, Total (as HCO3)	mg/L	132	281	6	0.05	9.85	32.1	127.0861	382.7873
Calcium, Dissolved	mg/L	540	2530	9	0.22	5.8628	42.925	98.7923	563
Calcium, Total	mg/L	303	884	26	0.24	10.04	48.56	105.6556	857
Carbonate Alkalinity, Diss. (as CaC mg/L)		60	73	72	0.05	0.5	1.5	2.525	5
Carbonate Alkalinity, Total (as CaC mg/L)		44	44	37	0	0.5	0.5	0.5	1.5
Carbonate, Total (as CO3)	mg/L	99	106	79	0	0.05	0.05	0.05	70
Chloride, Dissolved	mg/L	541	2532	11	1.3	7.3242	16.5	50.3333	19000
Chloride, Total	mg/L	294	848	3	0.5	9.4	21.675	55.8	8520
Color	Pt-Co	300	347	13	2.5	15	60	150	4500
Fluoride, Dissolved	mg/L	537	2431	1213	0.025	0.05	0.1033	0.25	2.8667
Fluoride, Total	mg/L	295	877	168	0.008	0.0715	0.18	0.3768	2.965
Hardness, Noncarbonate	mg/L	250	785	0	0.8018	6.4724	16.944	48.3181	3705.824
Hardness, Total	mg/L	382	1744	5	0.2	34.9315	178.468	299.9932	3927.77
Magnesium, Dissolved	mg/L	587	3160	77	0.1212	1.3834	3.35	9.4781	1180
Magnesium, Total	mg/L	191	252	3	0.05	1.3725	2.9	7.705	401
Organic Carbon, Dissolved	mg/L	148	160	15	0.5	2.325	6.2	13	75
Organic Carbon, Total	mg/L	578	1644	181	0.05	3.814	10.0625	21	415.15
Oxygen, Dissolved	mg/L	6	6	0	0	0.1	1	3.5	5.2
Potassium, Dissolved	mg/L	540	2528	150	0.0415	0.5958	1.19	3.0927	309.5
Potassium, Total	mg/L	304	885	6	0.01	0.5738	1.175	3.179	601.6
Silicate, Total	mg/L	2	2	0	16	NSD	NSD	NSD	25
Sodium Absorption Ratio		328	1113	0	0.0212	0.3006	0.5465	1.0128	45.6687
Sodium Percent		321	1085	0	0.7308	13.7589	23.5286	38.586	91
Sodium+Potassium	mg/L	318	1086	0	1.485	6.14	12.9575	34.9	6745
Sodium, Dissolved	mg/L	541	2533	1	0.69	4.4189	11.05	34.8	9170
Sodium, Total	mg/L	303	882	2	0.7	5.4	14	35.0469	3730
Specific Conductance	uS/cm	500	738	1	12	91.0833	310	655	30000
Specific Conductance, QA	uS/cm	384	1315	0	20	102	364.3334	676.4286	34400
Sulfate, Dissolved	mg/L	539	2502	283	0.1	1.7667	5.75	22.5	2100
Sulfate, Total	mg/L	296	866	196	0.05	4.225	10	29.85	1050
Sulfide Odor		293	522	0	0	NSD	NSD	2	26.7
Sulfide, Total	mg/L	468	699	363	0.014	0.025	0.069	0.4663	51
Total Dissolved Solids (TDS measure mg/L)		334	1335	1	1.35	99	262.8309	433.5	17700
Total Dissolved Solids (TDS-calcula mg/L)		264	333	0	14	84.8147	266.6227	451.7732	21951
Total Suspended Solids (TSS)	mg/L	17	19	0	8.205	15.6	43.34	105.1	982.4
Turbidity	ntu	527	1243	35	0.05	4.675	16	62.5	4005.5
Turbidity, Field	ntu	35	196	0	0.002	0.64	1.3622	7.3578	231
Turbidity, Lab	ntu	30	31	0	2.4	16	30.25	116	3700

GWIS3 RETRIEVAL STATISTICS

6/20/01

Enterprise CI3, Dade City, Pasco Co.  
50 mi Radius well search, 1621 Stations  
SURFICIAL AQUIFER SYSTEM

Parameter Description	Meas. Units	No. Station	No. Sample	No. BDLS	Minimum Value	Lower Quartile	Median Value	Upper Quartile	Maximum Value
pH, Lab	s.u.	181	232	0	3.87	6.14	6.84	7.18	11.24
Aluminum, Dissolved	ug/L	497	1004	298	7.2	17.5	32	108	13770
Aluminum, Suspended	ug/L	196	218	36	5	21	127.5	732.5	45769
Aluminum, Total	ug/L	447	704	37	10	70	264.5	949	237000
Antimony, Dissolved	ug/L	68	74	48	0.1	0.2	1	1.245	7.6
Antimony, Total	ug/L	292	317	272	0.04	0.1	0.2	0.75	5.5
Arsenic, Dissolved	ug/L	258	318	221	0.005	0.55	1.49	3	30.15
Arsenic, Total	ug/L	561	1403	933	0.3	0.75	1	2.6667	213.3333
Barium, Dissolved	ug/L	499	1084	148	0.25	8.9381	18.7	31.1	131
Barium, Suspended	ug/L	187	206	200	50	50	50	50	408
Barium, Total	ug/L	517	1029	212	0.05	9.845	18	36.8	845.5333
Beryllium, Dissolved	ug/L	258	281	276	0.03	0.1	0.15	0.2	1
Beryllium, Total	ug/L	292	318	300	0.01	0.2	0.25	0.25	4
Cadmium, Dissolved	ug/L	384	550	388	0.0025	0.04	0.1	0.25	31.025
Cadmium, Total	ug/L	546	1218	829	0.01	0.26	0.4475	0.6667	84
Chromium, Dissolved	ug/L	449	814	699	0.005	1.7433	2.5	2.8333	23
Chromium, Suspended	ug/L	63	66	30	0.5	0.5	1	2	82
Chromium, Total	ug/L	565	1462	882	0.1	2.0333	3.8667	6.5	935.7
Cobalt, Dissolved	ug/L	22	22	17	0.2	0.2	0.2	0.2	0.89
Cobalt, Total	ug/L	10	10	8	0.2	0.2	0.2	5	50
Copper, Dissolved	ug/L	503	998	805	0.015	2.3698	3.225	5	839
Copper, Suspended	ug/L	34	36	11	0.5	3	9.5	20	620
Copper, Total	ug/L	564	1471	692	0.1935	2.75	5	9.0625	747.5
Iron, Dissolved	ug/L	589	3105	365	1.5	48.8667	387.5	1417.241	40700
Iron, Suspended	ug/L	311	396	19	0.2	70	292	1500	46100
Iron, Total	ug/L	568	1737	24	5	315	1296.5	4379.167	144717
Lead, Dissolved	ug/L	513	1170	880	0.05	0.3625	0.5	1	2240
Lead, Suspended	ug/L	252	313	32	0.5	1.25	5.25	20.25	7370
Lead, Total	ug/L	563	1464	344	0.05	1.435	5.575	19.3934	3750
Manganese, Dissolved	ug/L	507	1573	304	0.014	5	11.4	27.875	1002.5
Manganese, Suspended	ug/L	178	196	113	0.5	0.5	0.5	3	300
Manganese, Total	ug/L	564	1460	159	0.3	7	14.975	42.425	1349.267
Mercury, Dissolved	ug/L	170	219	207	0.0001	0.0501	0.1	0.1	1.5001
Mercury, Total	ug/L	540	1107	924	0.05	0.05	0.05	0.09	26.025
Nickel, Dissolved	ug/L	482	912	829	0.03	2.515	3.5	5	62
Nickel, Suspended	ug/L	37	37	28	0.5	0.5	0.5	0.5	30
Nickel, Total	ug/L	465	803	686	0.35	3	4.3333	5	51.6667
Selenium, Dissolved	ug/L	205	261	222	0.005	1	1	2	11.6
Selenium, Total	ug/L	501	999	904	0.5	0.5	0.75	2	16
Silver, Dissolved	ug/L	416	687	656	0.015	0.2625	0.5	0.5	3.05
Silver, Suspended	ug/L	23	24	22	0.5	0.5	0.5	0.5	1
Silver, Total	ug/L	518	1007	882	0.02	0.26	0.5	2.1667	25
Strontium, Dissolved	ug/L	588	1796	81	1.5	32.425	238.7857	730	78900
Strontium, Suspended	ug/L	158	172	121	5	5	5	22	1329
Strontium, Total	ug/L	471	806	27	2	37.3167	219	677.3333	78000
Thallium, Dissolved	ug/L	72	78	53	0.01	0.025	0.05	1.5	6
Thallium, Total	ug/L	292	317	263	0.005	0.02	0.025	0.05	12
Vanadium, Dissolved	ug/L	292	319	219	0.2	1	1	2	36
Vanadium, Total	ug/L	292	317	177	0.25	1	2	5	202
Zinc, Dissolved	ug/L	507	1585	797	0.12	4	8	19.9773	3281.667
Zinc, Suspended	ug/L	160	177	117	5	5	5	21.5	14190
Zinc, Total	ug/L	557	1461	411	1	8.5	18	42.3333	25800
Cyanide, Dissolved	mg/L	22	25	25	0.005	0.005	0.005	0.005	0.005
Cyanide, Total	mg/L	180	207	198	0.0025	0.0025	0.005	0.005	0.0233
Ammonia+Organic Nitrogen, Dissolved	mg/L	499	1042	119	0.03	0.215	0.605	1.1292	27
Ammonia, Dissolved (As NH4)	mg/L	184	203	0	0.0258	0.161	0.3542	0.7405	4.8938
Ammonia, Dissolved (as N)	mg/L	574	1771	178	0.0025	0.0542	0.2317	0.51	50



GWIS3 RETRIEVAL STATISTICS

6/20/01

Enterprise CI3, Dade City.Pasco Co.  
50 mi Radius well search,1621 Stations  
SURFICIAL AQUIFER SYSTEM

Parameter Description	Meas. Units	No. Station	No. Sample	No. BDLS	Minimum Value	Lower Quartile	Median Value	Upper Quartile	Maximum Value
Ammonia, Total (as N)	mg/L	28	28	6	0.005	0.0625	0.285	0.555	2.4
Nitrate+Nitrite, Dissolved (As NO3)	mg/L	48	66	0	0.13	0.1786	0.4414	1.296	146.2432
Nitrate+Nitrite, Dissolved (as N)	mg/L	539	2472	952	0.002	0.013	0.03	0.1037	30
Nitrate+Nitrite, Total (as N)	mg/L	267	790	210	0.0005	0.0057	0.016	0.05	33.91
Nitrate, Dissolved (as N)	mg/L	27	183	92	0.0109	0.0259	0.0483	0.1775	3.175
Nitrate, Total (as N)	mg/L	153	628	288	0.002	0.0065	0.0172	0.048	6.1112
Nitrate, Total (as NO3)	mg/L	1	4	3	0.045	NSD	NSD	NSD	0.045
Nitrite, Dissolved (as N)	mg/L	20	134	130	0.005	0.01	0.01	0.01	0.0167
Nitrite, Total (as N)	mg/L	116	635	421	0.002	0.0023	0.0039	0.008	0.1993
Nitrogen, Dissolved	mg/L	118	129	0	0.24	0.65	1.005	2.24	34
Organic Nitrogen, Dissolved	mg/L	193	213	13	0.1	0.28	0.41	0.73	4.46
Orthophosphate, Dissolved (as P)	mg/L	547	1733	330	0.002	0.012	0.036	0.115	9.9
Orthophosphate, Dissolved (as PO4)	mg/L	1	1	0	0.092	NSD	NSD	NSD	0.092
Orthophosphate, Total (as P)	mg/L	101	118	26	0.0025	0.0433	0.104	0.277	1.815
Phosphate, Total	mg/L	81	91	5	0.0015	0.042	0.118	0.348	1.39
Phosphorus, Dissolved (as P)	mg/L	520	1176	100	0.002	0.0223	0.0512	0.13	111
Phosphorus, Total (as P)	mg/L	68	219	27	0.005	0.0413	0.0506	0.1152	1.4498
Silica, Dissolved	mg/L	580	1756	7	0.5	5.225	8.8834	15.5	88
1,1,1-Trichloroethane	ug/L	477	1201	1194	0.25	0.25	0.25	0.93	1850.125
1,1,2,2-Tetrachloroethane	ug/L	473	1213	1211	0.25	0.25	0.25	1.25	64.125
1,1,2-Trichloroethane	ug/L	479	1227	1226	0.25	0.25	0.25	0.5025	8.5833
1,1-Dichloroethane	ug/L	479	1245	1240	0.25	0.25	0.25	0.645	1600.125
1,1-Dichloroethene	ug/L	479	1245	1242	0.25	0.25	0.25	0.6525	9.625
1,1-Dichloropropane	ug/L	22	25	25	0.25	0.25	0.25	0.25	0.25
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	39	43	43	0.01	0.01	0.01	0.02	0.5
1,2-Dibromoethane (EDB)	ug/L	198	498	498	0.0025	0.25	2.5	2.5	2.5
1,2-Dichlorobenzene	ug/L	473	1251	1247	0.25	0.25	0.3333	2.625	8.5833
1,2-Dichloroethane	ug/L	479	1245	1244	0.25	0.25	0.25	0.505	8.5833
1,2-Dichloroethene (cis)	ug/L	142	412	412	0.25	2.5	2.5	2.5	2.5
1,2-Dichloroethene (trans)	ug/L	479	1219	1219	0.25	0.25	0.25	0.5	8.5833
1,2-Dichloropropane	ug/L	479	1245	1241	0.25	0.25	0.25	0.625	8.5833
1,3-Dichlorobenzene	ug/L	467	1227	1227	0.25	0.25	0.3125	2.625	8.5833
1,3-Dichloropropene	ug/L	155	350	350	0.25	0.25	0.25	0.25	10
1,3-Dichloropropene (cis)	ug/L	460	1067	1067	0.25	0.25	0.25	1.6719	12.75
1,3-Dichloropropene (trans)	ug/L	460	1069	1069	0.25	0.25	0.25	1.5921	8.5833
1,4-Dichlorobenzene	ug/L	467	1227	1218	0.25	0.25	0.3125	2.625	8.5833
2,4,5-TP (Silvex)	ug/L	69	71	71	0.001	0.001	0.001	0.001	0.025
2,4-D	ug/L	89	95	93	0.0025	0.0025	0.0025	0.05	3.69
2,4-DB	ug/L	22	25	25	0.5	0.5	0.5	0.5	0.5
2-Chloroethylvinyl ether	ug/L	479	1244	1244	0.25	0.25	0.25	0.75	8.5833
2378-Tetrachlorodibenzo-P-Dioxin (T)	ug/L	7	7	7	5	5	5	5	5
3-Hydroxycarbofuran	ug/L	296	335	335	0.5	1	1	1	2.5
Acrolein	ug/L	45	45	45	0.5	0.5	12.5	12.5	25
Acrylonitrile	ug/L	45	45	45	0.5	0.5	12.5	12.5	25
Alachlor	ug/L	307	356	356	0.075	0.145	0.145	0.145	0.5
Aldicarb	ug/L	306	356	356	0.1	1	1	1	3
Aldicarb sulfone	ug/L	296	335	335	0.25	1	1	1	2.5
Aldicarb sulfoxide	ug/L	295	334	334	0.25	1	1	1	2.5
Aldrin	ug/L	325	419	419	0.002	0.0048	0.0048	0.0049	5
Ametryne	ug/L	1	1	1	0.015	NSD	NSD	NSD	0.015
Atrazine	ug/L	307	357	355	0.0133	0.024	0.024	0.0249	0.39
BHC, Alpha	ug/L	302	387	387	0.0047	0.0048	0.0048	0.0049	3.335
BHC, Beta	ug/L	302	361	361	0.0042	0.0048	0.0048	0.0052	2.1683
BHC, Delta	ug/L	302	361	361	0.0038	0.0048	0.0048	0.0049	2.1683
BHC, Gamma (Lindane)	ug/L	328	449	449	0.0003	0.0048	0.0048	0.0049	3.335
Benfluralin	ug/L	22	25	25	0.002	0.005	0.005	0.005	0.005
Benzene	ug/L	473	1221	1213	0.25	0.25	0.25	0.5	8.5833

GWIS3 RETRIEVAL STATISTICS

6/20/01

Enterprise CI3, Dade City.Pasco Co.  
50 mi Radius well search,1621 Stations  
SURFICIAL AQUIFER SYSTEM

Parameter Description	Meas. Units	No. Station	No. Sample	No. BDLS	Minimum Value	Lower Quartile	Median Value	Upper Quartile	Maximum Value
Bromacil	ug/L	307	356	343	0.073	0.145	0.145	0.15	67
Bromodichloromethane	ug/L	479	1245	1245	0.25	0.25	0.25	0.5	8.5833
Bromoform	ug/L	479	1249	1249	0.25	0.25	0.25	0.5	8.5833
Bromomethane	ug/L	409	942	942	0.25	0.25	0.375	1.9375	12.75
Captan	ug/L	1	1	1	0.005	NSD	NSD	NSD	0.005
Carbaryl	ug/L	296	335	335	0.5	1	1	1	2.5
Carbofuran	ug/L	306	359	353	0.5	1	1	1	12.8
Carbon tetrachloride	ug/L	479	1245	1245	0.25	0.25	0.25	0.5	8.5833
Carbophenothion (Trithion)	ug/L	1	1	1	0.01	NSD	NSD	NSD	0.01
Chlordane	ug/L	329	411	411	0.005	0.05	0.095	0.095	5.025
Chlorobenzene	ug/L	479	1245	1242	0.25	0.25	0.25	0.6437	8.5833
Chlorobenzilate	ug/L	295	334	334	0.0235	0.024	0.024	0.0245	0.1
Chloroethane	ug/L	479	1245	1245	0.25	0.25	0.25	0.5	8.5833
Chloroform	ug/L	479	1245	1232	0.25	0.25	0.3125	1.325	8.5833
Chloromethane	ug/L	479	1245	1244	0.25	0.25	0.3125	0.75	8.5833
Chloropicrin	ug/L	37	40	40	0.001	0.001	0.005	0.005	0.005
Chlorothalonil (Bravo)	ug/L	22	25	25	0.001	0.01	0.01	0.01	0.01
Chlorotoluene	ug/L	31	34	34	0.25	0.25	0.25	0.25	0.5
Chlorpyrifos	ug/L	298	337	337	0.005	0.0475	0.0478	0.0485	0.06
DDD (p,p')	ug/L	329	438	438	0.005	0.0095	0.0095	0.01	2.505
DDE (p,p')	ug/L	329	438	438	0.002	0.0095	0.0095	0.01	5.27
DDT (p,p')	ug/L	329	450	450	0.005	0.0098	0.0145	0.0145	2.675
Dacthal (DCPA)	ug/L	15	15	15	0.025	0.25	0.25	0.25	0.25
Demeton	ug/L	7	7	7	0.5	0.5	0.5	0.5	0.5
Diazinon	ug/L	302	350	344	0.005	0.0475	0.0479	0.0485	1.8
Dibromochloromethane	ug/L	479	1245	1245	0.25	0.25	0.25	0.5	8.5833
Dicamba	ug/L	22	25	25	2.5	2.5	2.5	2.5	2.5
Dichloran	ug/L	1	1	1	0.002	NSD	NSD	NSD	0.002
Dichlorobenzene	ug/L	119	384	384	0.5	2.5	2.5	2.5	2.5
Dichlorodifluoromethane	ug/L	283	614	614	0.25	0.5	0.5	2.5	5
Dicofol (Kelthane)	ug/L	22	25	25	0.005	0.01	0.01	0.01	0.01
Dieldrin	ug/L	329	449	449	0.001	0.0095	0.0095	0.01	2.67
Disulfoton	ug/L	298	337	337	0.025	0.07	0.07	0.075	0.09
Diuron	ug/L	307	360	353	0.0045	0.2	0.2	0.2	15.2
Endosulfan I	ug/L	329	428	428	0.0047	0.0073	0.0095	0.0095	4.0033
Endosulfan II	ug/L	302	370	370	0.0047	0.0095	0.0095	0.01	4.0083
Endosulfan sulfate	ug/L	302	378	369	0.0095	0.0095	0.0095	0.01	2.7625
Endrin	ug/L	330	410	410	0.0005	0.0123	0.024	0.0243	6
Endrin aldehyde	ug/L	302	354	354	0.0095	0.0145	0.0145	0.0145	5.5
Ethion	ug/L	298	337	337	0.0192	0.024	0.024	0.0245	0.03
Ethoprop	ug/L	307	357	355	0.005	0.0475	0.0475	0.0485	0.7877
Ethyl Parathion	ug/L	66	67	67	0.0045	0.005	0.005	0.005	0.035
Ethylbenzene	ug/L	473	1221	1216	0.25	0.25	0.25	1.75	500
Fenamiphos	ug/L	307	357	356	0.005	0.145	0.145	0.145	0.25
Heptachlor	ug/L	329	412	412	0.0015	0.0048	0.0048	0.0049	5
Heptachlor epoxide	ug/L	329	413	412	0.0047	0.0095	0.0095	0.0115	5
Hexazinone	ug/L	307	356	351	0.05	0.095	0.095	0.1	1.3
Imidacloprid	ug/L	278	311	311	0.2	0.2	0.2	0.2	0.2
Iprodione	æg/L	278	311	311	0.375	0.38	0.385	0.39	0.48
Isodrin	ug/L	276	310	310	0.0073	0.0095	0.0095	0.0095	0.012
Isofenphos	ug/L	298	337	337	0.0382	0.0475	0.048	0.049	0.1
Linuron	ug/L	278	311	311	0.2	0.2	0.2	0.2	0.2
Malathion	ug/L	284	323	323	0.005	0.07	0.07	0.075	0.1
Metalaxyl	ug/L	299	338	337	0.25	0.285	0.29	0.295	4.7
Metam Sodium	ug/L	15	15	15	1.5	1.5	1.5	1.5	1.5
Methamidophos	ug/L	22	25	25	0.045	1	1	1	1
Methomyl	ug/L	306	575	574	0.5	1	1	1	24.75

GWIS3 RETRIEVAL STATISTICS

6/20/01

Enterprise CI3, Dade City.Pasco Co.  
50 mi Radius well search,1621 Stations  
SURFICIAL AQUIFER SYSTEM

Parameter Description	Meas. Units	No. Station	No. Sample	No. BDLS	Minimum Value	Lower Quartile	Median Value	Upper Quartile	Maximum Value
Methoxychlor	ug/L	311	384	384	0.005	0.0238	0.024	0.0245	0.0878
Methyl Azinphos (Guthion)	ug/L	283	322	322	0.08	0.095	0.095	0.0975	1
Methyl Parathion	ug/L	298	338	338	0.025	0.0475	0.0478	0.0485	0.06
Methyl tert-Butyl Ether (MTBE)	ug/L	31	34	34	0.25	0.25	0.25	0.5	5
Methylene chloride	ug/L	479	1245	1242	0.25	0.25	0.25	0.8	8.5833
Methylisothiocyanate (MITC)	ug/L	22	25	25	37.5	37.5	37.5	37.5	37.5
Metolachlor	ug/L	278	311	311	0.235	0.24	0.24	0.245	0.3
Metribuzin	ug/L	307	356	356	0.0025	0.095	0.095	0.1	0.25
Mevinphos	ug/L	298	337	337	0.005	0.12	0.12	0.12	0.15
Mirex	ug/L	66	67	67	0.0005	0.0005	0.0005	0.0005	0.015
Naled	ug/L	298	337	337	0.05	0.38	0.3825	0.39	0.48
Norflurazon	ug/L	298	337	334	0.1283	0.145	0.145	0.145	3.2
Oxamyl	ug/L	306	359	359	0.5	1	1	1	6.1
PCNB	ug/L	276	310	310	0.0067	0.0095	0.0095	0.0095	0.012
Pendimethalin	ug/L	22	25	25	0.005	1	1	1	1
Permethrin	ug/L	22	25	25	0.1	0.5	0.5	0.5	0.5
Perthane	ug/L	1	1	1	0.1	NSD	NSD	NSD	0.1
Phorate	æg/L	278	311	311	0.0465	0.0475	0.048	0.0485	0.06
Picloram	ug/L	22	25	25	0.01	0.01	0.01	0.01	0.01
Prometon	ug/L	218	246	246	0.08	0.095	0.095	0.095	0.12
Prometryn	ug/L	298	337	337	0.0382	0.0475	0.048	0.049	0.5
Propazine	ug/L	21	22	17	0.0325	0.05	0.05	0.05	0.37
Propoxur	ug/L	296	352	351	0.5	1	1	1	3.75
Simazine	ug/L	307	357	355	0.0145	0.024	0.024	0.025	0.66
Strobane	ug/L	1	1	1	0.25	NSD	NSD	NSD	0.25
Styrene	ug/L	38	40	40	0.25	0.25	0.25	0.5	2.5
Tebuthiuron (GRASLAN, SPIKE)	ug/L	218	245	245	0.465	0.475	0.48	0.485	0.6
Terbufos	ug/L	298	337	337	0.05	0.07	0.07	0.075	0.25
Terbutylazine	ug/L	1	1	1	0.1	NSD	NSD	NSD	0.1
Terbutryn	ug/L	1	1	1	0.025	NSD	NSD	NSD	0.025
Tetrachloroethene	ug/L	479	1271	1270	0.25	0.25	0.25	0.625	8.5833
Toluene	ug/L	473	1223	1167	0.25	0.25	0.3125	1.375	45.3725
Toxaphene	ug/L	330	418	418	0.0375	0.355	0.355	0.365	366.6667
Triademefon	ug/L	298	337	337	0.1133	0.12	0.12	0.125	0.5
Trichloroethene	ug/L	479	1227	1226	0.25	0.25	0.25	0.5275	8.5833
Trichlorofluoromethane	ug/L	452	1088	1077	0.25	0.25	0.3417	1.5679	8.5833
Trifluralin	ug/L	22	25	25	0.005	0.005	0.005	0.005	0.005
Trimethylbenzene	ug/L	7	7	7	2.5	2.5	2.5	2.5	2.5
Vinyl Chloride	ug/L	479	1245	1228	0.25	0.25	0.25	1.3929	8.5833
Xylenes	ug/L	403	695	680	0.25	0.25	0.25	0.25	12.625

NOTE: Data from different water bodies were treated as separate averages.  
NOTE: Values below detection limit were treated as 1/2 detection limit.  
NOTE: Multiple values at a single station were averaged.  
NOTE: Upper and lower quartiles estimated from upper and lower fourths (Hollander, Mosteller, Tukey 1983)  
NOTE: NSD indicates insufficient data for calculation

re analyzed separately.  
treated as 1/2 detection limit.  
were averaged.  
from upper and lower fourths (Hollander, Mosteller, Tukey 1983)  
calculated