

Bioassays of

MacDill Air Force Base Defense Fuel Support Point Industrial WWTF

Hillsborough County

NPDES #FL0035149

Sampled August 30, 2004

January 2005

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

MacDill Air Force Base Defense Fuel Support Point Industrial Wastewater Treatment Facility, 5313 N. Boundary Road Bldg. 1122, MacDill Air Force Base, Tampa, Hillsborough County, Florida, NPDES #FL0035149. Effluent samples for this facility were collected on August 30, 2004

Introduction

The MacDill Air Force Base (AFB) Defense Fuel Support Point is a regional wholesale fuel supply center which stores and ships petroleum products to all branches of the military. This facility does not have a design flow. The mean monthly flow from January 1 through August 31, 2004, (excluding no-flow during March and May) was 0.61 million gallons per day (MGD). The permittee is authorized to discharge stormwater from Outfall D-001 to Tampa Bay, a Class III marine surface water, from within the diked areas, which contain rack runoff, hydrostatic test water, pump house wastewater and fire suppression test water. Effluent samples are collected at the point of discharge from the oil/water separator structure.

The facility was issued an Administrative Order (AO) No. AO-068-SW, on the issuance date of the permit, that requires additional effluent and flow monitoring requirements for interim discharge point from Outfall D-003, the outfall from which the facility has been discharging. The AO also requires the construction of an oil-water separator prior to the point of discharge, Outfall D-001. All construction, per the AO, was to be completed by October 29, 2004. The facility is pending submittal of the completed construction report. The facility will commence discharging from D-001 pending permit renewal

The discharge monitoring reports (DMRs) show the facility has had and still has violations in regards to not monitoring or reporting flow, pH, and other information, and has exceeded its oil and grease water quality standard limit, which has not been reported (facility information provided by Nahir Cornwell and Ilia Balcom of FDEP Southwest District office).

Methods

Samples were collected from the NPDES sampling point D-001 (final discharge point) by Nahir Cornwell and Lori Pillsbury (FDEP Southwest District Office) following DEP-SOP-001/01 FS 2400 Wastewater Sampling. All DEP SOP's are available on the web at: http://www.floridadep.org/labs/qa/sops.htm

The 48-hour acute screening toxicity tests and algal growth potential test were performed following internal DEP SOP's TA07_01,TA07_02, and TA08_01 through TA08_07. All internal DEP SOP's are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp

Prior to test initiation, bioassay samples were aerated for two hours at approximately 100 bubbles per minute, reducing the dissolved oxygen concentration from 10.9 mg/L to 7.9 mg/L.

Toxicity Test Results

Tests were performed August 31 – September 2, 2004.

Ceriodaphnia dubia 48-hr acute screening bioassay – LC_{50} > 100%, 0%* mortality in 100% sample at 48 hours

Cyprinella leedsi 48-hr acute screening bioassay – LC_{50} > 100%, 0%* mortality in 100% sample at 48 hours

See Appendix 1 for bioassay bench sheets.

*NOTE: In a 48-hr acute screening test of 100% effluent, mortality of <20% provides reasonable assurance that the effluent meets the acute toxicity criterion of Florida's Surface Water Quality Standards (Rule 62-302.500 (1)(a)4, F.A.C.). Mortality between 20-50% mortality indicates low to moderate levels of toxicity, and further action may be required. Mortality of >50% provides reasonable assurance that the

effluent fails to meet the minimum requirement to discharge to waters of the state (Rule 62-4.244(3)(a), F.A.C.)

Algal Growth Potential

The effluent AGP was 0.3 mg dry wt/L (between the laboratory minimum detection limit and practical quantitation limit) of the unicellular green alga, *Pseudokirchneriella subcapitata*, formerly known as *Selenastrum capricornutum*. Raschke and Shultz (1987) found that Algal Growth Potential (AGP) values above 5.0 mg dry weight/L represent a "problem" threshold for fresh receiving waters, implying nutrient enrichment. A saltwater AGP test was not performed; however, the freshwater AGP results suggest that nutrient enrichment is likely not an issue.

The analytical chemistry suggests that the effluent is nitrogen-limited. The predicted AGP based on nitrogen and phosphorus concentrations was 4.29 (±20%) mg dry wt/L (Table 1; Miller et al. 1978). Differences between actual and predicted AGP values greater than an order of magnitude are considered sufficient evidence to warrant follow up testing with the algal growth inhibition bioassay. True algal growth inhibition can only be determined by performing an actual algal growth inhibition test. Should algal growth be suspected, the district should request that the algal growth inhibition test be performed as a follow-up to the inspection.

See Table 1 for AGP results.

Chemistry Results

Total residual chlorine and total ammonia were not detected in the bioassay sample in the laboratory. The total ammonia concentration in the sample collected and preserved for chemical analysis was 0.025mg/L. Based on field measurements of the pH, salinity and temperature of the effluent when collected, the calculated unionized ammonia concentration was < 0.001 mg/L.

Aluminum and lead were detected in the effluent at levels that comply with Class III Marine water quality criteria. Copper, nickel, and zinc were detected between the laboratory minimum detection limits (MDL) and practical quantitation limits (PQL). Effluent iron (453 µg/L) and dissolved oxygen (2.9 mg/L) concentrations did not meet their respective Class III Marine water quality criteria of ≤ 300 µg/L (62-302.530(39), F.A.C.) and ≥ 4.0 mg/L (62-302.530(31), F.A.C.).

See Table 2 for results of analytes detected in the effluent, and corresponding limits.

See Appendix 2 for a complete list of chemical analyses performed.

Conclusion

The effluent samples collected from D-001 for this facility on August 30, 2004, did not show acute toxicity to either test species during the 48-hour acute bioassays. The effluent AGP result did not exceed the "problem" threshold for fresh receiving waters, suggesting nutrient enrichment is likely not an issue. Effluent iron and dissolved oxygen concentrations failed to meet Class III Marine water quality standards.

Literature Cited

Miller, W. E., T. E. Maloney, and J. C. Greene. 1978. The *Selenastrum capricornutum* Printz algal assay bottle test. EPA-600/9-78-018. U. S. EPA, Cincinnati, Ohio. 126 p.

Raschke, R. L. and D. A. Schultz. 1987. The use of the algal growth potential test for data assessment. J. Wat. Poll. Cont. Fed. 59(4): 222-227.

Table 1. Measured and predicted algal growth potential (AGP) for total soluble nitrogen (TSIN) limitation of Pseudokirchneriella subcapitata *for samples from MacDill Air Force Base Defense Fuel Support Industrial WWTF on August 30, 2004.*

Location	AGP (measured)	Predicted AGP (TSIN) ± 20%	Inorganic N:P ratio
Effluent Samples	0.300 AJU	4.29 ± 0.858	6.28

A - Value reported is the mean of two or more determinations

J - Estimated value

U - Material analyzed for but not detected; value reported is the minimum detection limit

Table 2. Effluent limits, Class III Criteria and water quality data for samples collected from MacDill Air Force Base Defense Fuel Support Industrial WWTF on August 30, 2004.

MacDill Air Force Base Defense Fuel Support Industrial WWTF	Class III Marine Standards	Effluent Limits	Effluent Samples
Organic Constituents (µg/L)			
None Detected	-	-	-
Benzene	≤ 71.28 a	Report	0.5 U
Metals (µg/L unless otherwise noted)			
Aluminum	≤ 1500	-	103
Arsenic	≤ 50	-	17 U
Cadmium	≤ 9.3	-	0.025 U
Calcium (mg/L)	-	-	46.6 A
Chromium-III	-	-	2 U
Copper	≤ 3.7	Report	0.96 I
Iron	≤ 300	Report	453 A
Lead	≤ 8.5	Report	3.5 A
Magnesium (mg/L)	-	-	4.5 A
Nickel	≤ 8.3	-	2.2 I
Selenium	≤ 71	-	1 U
Silver	-	-	0.02 U
Zinc	≤ 86	Report	4.2 I
Nutrients (mg/L)			
TSS	-	Report	4 I
Ortho-phosphate	-	-	0.018
Total Phosphorus	-	-	0.066
Ammonia	-	-	0.025
Unionized Ammonia	-	-	< 0.001 c
Nitrate+Nitrite	-	-	0.088
Total Kjeldahl Nitrogen	-	-	0.79
Organic Nitrogen	-	-	0.765 c
Total Nitrogen	-	-	0.878 c
Turbidity	t	-	4.4 A
General Physical and Chemical Parameters			
Dissolved Oxygen (mg/L)	≥ 4 s	Report	2.9
pH (S.U.)	6.5 - 8.5	6.5 - 8.5	7.4
Conductivity (umhos/cm)	-	-	423
Temperature (C)	-	-	29.8
BOD (mg/L)	-	-	1.4 K
Oil and Grease (mg/L)	≤ 5	≤ 5	0.84 I
Hardness (mg/L)	-	-	134.9 c
Total Residual Chlorine (mg/L) (lab)	≤ 0.01	-	≤ 0.03 U
AGP (mg DryWt/L)	-	-	0.3 AJU

Value exceeds the Class III Marine Water Quality Criteria (62-302, F.A.C.)

a - Annual average
c - calculated value
t - Shall not exceed 29 NTUs above background
A - Value reported is the mean of two or more determinations
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J - Estimated value
K - Actual value is known to be less than value given
U - Material analyzed for but not detected; value reported is the minimum detection limit
s - Single sample

FDEP Biology Section - Acute
Bioassay Bench Sheets

Facility: Mac Dill Defense Fuel Supply
Address: Mac Dill AFB
City: Tampa **County:** Hillsborough
Contact/District: Lia Balcom / SWD
NPDES Permit #: FL 0035149
LIMS Job #: TLH-2004-08-31-14 **LIMS Sample #:** 778476
Lims Data Entry: MF 9/2/04 M.C Data Entry Verification: DN 9/2/04

Sample Collection: Date: 8/30/04 Time: 1000
Hold time Start: Date: 8/30/04 Time: 1000

Comments: Sample aerated for 2hours to reduce DO from 10.9 mg/L to 7.9. MF 11-16-04

Instructions (for below): Circle appropriate wording. If yes is circled complete blanks.

Test Type: (Screening)/Definitive
(Static) / Static Renewal / Flow-through
Test Duration: (48) 96 Hours.
Light Intensity : 50 - 100 ft. candles.
Photoperiod : 16 hours light 8 hours dark.

Test 1 validation:
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

Test 2 validation:
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

Initial sample handling:
PH adjustment : yes (no) Initial pH NaOH N HCl N Drops mL Final pH
Aeration : (yes) no Initial DO: 10.9 mg/L Final DO: 7.9 mg/L Duration: ~~180~~ 120 MF 11-16-04 corrected aeration time, minutes Rate: ~ 100 bubbles/min
Salinity adjusted (Test 1): yes (no) Initial Salinity: Final Salinity: Salts Hypersaline brine
Salinity adjusted (Test 2): yes (no) Initial Salinity: Final Salinity: Salts Hypersaline brine
Dechlorination: yes (no) mL of 0.025N Sodium Thiosulfate per liter of sample. Final TRC

Temperature Range °C
Incubator # 3 Range 24.0 - 25.0
Room B246: 23.8°C 24.0°C
Waterbath: NA

Sample Validation:
Temperature: Shipped ≤6°C (Yes) No Hand Delivered: Cooling (received °C < collected °C) Yes No
Holding Time: ≤36 Hours (Yes) No (Composite-end of collection; grab-when collected; 4 in 24 - time last sample collected)

Investigators' Signatures
Deanna Nicholson
Mandy Elizabeth
Sarah Pritchard
Jason Davis
Nicole Wellendorf
REVIEWER

Water Quality Parameters	20% DMW	Well Water	Salt Water ASW NSW Test 1	Salt Water ASW NSW Test 2	Moderately Hard Water	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl2 (mg/L):	N/A	N/A	N/A	N/A	N/A	Not measured			DN
Lab Total Residual Cl2 (mg/L):	<0.03	<0.03				<0.03	HACH	SP	DN
Alkalinity (mg/L as $CaCO_3$):	95	157				158	HACH	SP	DN
Hardness (mg/L as $CaCO_3$):	88	137				140	HACH	SP	DN
Total Ammonia (mg/L as N):	<0.017	<0.017				<0.017	DENVER	MF	DN
Salinity (ppt):	<1	<1				<1	YSI	DN	SP

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FDEP Biology Section - - Bioassay Bench Sheet

Survival

LIMS Sample #: 778476 Test #: 1 Test Started: Date 8/31/04 Time: 1315

Organism: C. dubia Test Ended: Date 9/6/04 Time: 1240

Organism Batch: 34 Diluent/ Batch: 20% DMW / 31

Organism Age: <24hr Food: (YCT) P. subcapitata Artemia

Chamber Size 30 mL Batch: 5 35

Test Volume 20 mL Feeding: Prior to test - Prior to renewal - Daily

Concentration	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	A	A	5	5	5			
	B	B	5	5	5			
	C	C	5	5	5			
	D	D	5	5	5			
100%	A	A	5	5	5			
	B	B	5	5	5			
	C	C	5	5	5			
	D	D	5	5	5			

Organisms loaded by: DN Checked by: DN DN DN

Loading Verified by: MC (initials)

Comments:

m = missing d = dead BR = before renewal AR = after renewal

Test Results:

% mortality in 100% sample 0

LC_{50}: >100 If Calculated: 95% CI _____ Method: _____

Screening Tests: Report LC50 as >100%, =100%, or <100%.

Substitue highest test concentration used if other than 100% (example: Ocean outfall tested at 30% concentration).

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FDEP Biology Section - - Bioassay Bench Sheet
Survival

LIMS Sample #: 778476 Test #: 2 Test Started: Date 8/31/04 Time: 1300
Organism: C. leedsi Test Ended: Date 9/02/04 Time: 1230
Organism Batch: 21 Diluent/ Batch: Well H_2O 1 N/A
Organism Age: 12 dys Food: YCT *P. subcapitata* Artemia 041254254
Chamber Size 1000 mL Batch: — —
Test Volume 500 mL Feeding: ~~Prior to test~~ - Prior to renewal - Daily

Concentration	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	A	F9	5	5	5	~~5~~ DN		
	B	F10	5	5	5	~~5~~ DN		
	C	F11	5	5	5			
	D	F12	5	5	5			
100%	A	F13	5	5	5			
	B	F14	5	5	5			
	C	F15	5	5	5			
	D	F16	5	5	5			

Organisms loaded by: SD Checked by: SD SD SD
Loading Verified by: DN (initials)

m = missing d = dead BR = before renewal AR = after renewal

Comments:

Test Results:
% mortality in 100% sample 0
LC_{50}: >100 If Calculated: 95% CI _____ Method: _____

Screening Tests: Report LC50 as >100%, =100%, or <100%.
Substitue highest test concentration used if other than 100% (example: Ocean outfall tested at 30% concentration).

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Bioassay Parameters

LIMS Sample # : 778476 Test # : 1 of 2

TEST SOP: TA07_ 01 Test Species: (Ceriodaphnia dubia) Cyprinella leedsi Pimephales promelas Americamysis bahia Menidia beryllina Other:_____

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Concentration CTRL	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	1	B			
pH (S.U.)	8.1		8.2			
Temperature °C	24.0		23.8 (A)			
Dissolved Oxygen mg/L	8.1		7.8			
Conductivity (µmhos) mmhos	175		230			
(initials) Measured by:	DN		DN			
(initials) Recorded by:	DN		DN			

Comments: (A) Sample sat out in lab. Incubator #7 Temperature @ 24.0 °C - 25.0 °C. DN 8/1/04

Concentration 100 %	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A		B			
pH (S.U.)	8.2		8.3			
Temperature °C	24.3		24.0			
Dissolved Oxygen mg/L	(A) ~~8.0~~	DN 8.4	7.8			
Conductivity (µmhos) mmhos	(B) 390	340 DN	375			
(initials) Measured by:	DN		DN			
(initials) Recorded by:	DN		DN			

Comments: (A) D.O. @ 0 Hr = 8.4, Measured wrong sample DN. 8/31/04.
(B) Conductivity @ 0 Hr = 340, Measured wrong sample DN. 8/31/04.

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

Bioassay Parameters

LIMS Sample #: 778496 **Test #:** 2 of 2

TEST SOP: TA07_ 02 **Test Species:** *Ceriodaphnia dubia* (*Cyprinella leedsi*) *Pimephales promelas* *Americamysis bahia* *Menidia beryllina* Other:_____

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Concentration CTRL	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	8.1	8.3	8.4			
Temperature °C	24.2	24.8	24.6			
Dissolved Oxygen mg/L	8.4	7.5	7.4			
Conductivity (µmhos) mmhos	265	270	290			
(initials) Measured by:	DN	DN	DN			
(initials) Recorded by:	DN	DN	DN			

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	8.2	8.3	8.3			
Temperature °C	24.1	25.5	24.7			
Dissolved Oxygen mg/L	8.4	7.1	7.4			
Conductivity (µmhos) mmhos	350	365	390			
(initials) Measured by:	DN	DN	DN			
(initials) Recorded by:	DN	DN	DN			

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos / mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos / mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

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Appendix 2. Chemical analyses performed on the effluent from MacDill Air Force Base Defense Fuel Support Industrial WWTF, sampled on August 30, 2004.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
8/30/2004 10:00	FY13	Bio-AGP/LimNut	Algal Growth Potential	0.3	mg DryWt/L	AJU	0.3	0.9
8/30/2004 10:00	FY13	Bio-BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.4	mg/L	K		
8/30/2004 10:00	FY13	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
8/30/2004 10:00	FY13	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
8/30/2004 10:00	FY13	Bio-Toxicology	Bioassay-Acute-Screen-FW-C.dubia, LC50	100	LC50	L		
8/30/2004 10:00	FY13	Bio-Toxicology	Bioassay-Acute-Screen-FW-Fish, LC50	100	LC50	L		
8/30/2004 10:00	FY13	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
8/30/2004 10:00	FY13	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
8/30/2004 10:00	FY13	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
8/30/2004 10:00	FY13	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
8/30/2004 10:00	FY13	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
8/30/2004 10:00	FY13	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
8/30/2004 10:00	FY13	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Benzidine	95	ug/L	U	95	380
8/30/2004 10:00	FY13	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
8/30/2004 10:00	FY13	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
8/30/2004 10:00	FY13	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
8/30/2004 10:00	FY13	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8

8/30/2004 10:00	FY13	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
8/30/2004 10:00	FY13	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	Diethyl phthalate	18	ug/L	UJ	18	72
8/30/2004 10:00	FY13	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
8/30/2004 10:00	FY13	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
8/30/2004 10:00	FY13	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
8/30/2004 10:00	FY13	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
8/30/2004 10:00	FY13	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
8/30/2004 10:00	FY13	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	11
8/30/2004 10:00	FY13	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
8/30/2004 10:00	FY13	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
8/30/2004 10:00	FY13	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
8/30/2004 10:00	FY13	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
8/30/2004 10:00	FY13	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
8/30/2004 10:00	FY13	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
8/30/2004 10:00	FY13	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
8/30/2004 10:00	FY13	BNA-Water	TRPH	0.5	mg/L	U	0.5	2
8/30/2004 10:00	FY13	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
8/30/2004 10:00	FY13	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	1,2,4-Trichlorobenzene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	1,2-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	1,3-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	1,4-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	2,4,6-Trichlorophenol	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	2,4-Dichlorophenol	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	58
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	2,4-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	2,6-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	2-Chloronaphthalene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	2-Chlorophenol	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	2-Nitrophenol	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.8

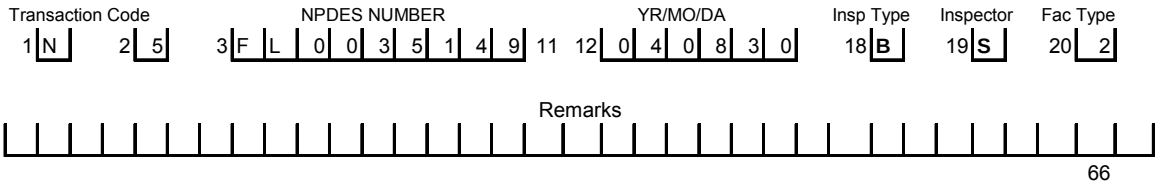
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	4-Bromophenyl phenyl ether	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	4-Chloro-3-methylphenol	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.7
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	4-Nitrophenol	14	ug/L	U	14	58
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Acenaphthene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Acenaphthylene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Anthracene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Benzidine	96	ug/L	U	96	380
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Benzo(a)anthracene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Benzo(a)pyrene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Benzo(b)fluoranthene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Benzo(g,h,i)perylene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Benzo(k)fluoranthene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Bis(2-chloroethoxy)methane	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Bis(2-chloroethyl)ether	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	58
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Chrysene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Di-n-octyl phthalate	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Dibenzo(a,h)anthracene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Diethyl phthalate	18	ug/L	U	18	71
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Fluoranthene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Fluorene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Hexachlorobenzene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	12
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Indeno(1,2,3-cd)pyrene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Isophorone	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.7
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.7
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Naphthalene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.7
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Phenanthrene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Phenol	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	Pyrene	0.96	ug/L	U	0.96	3.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	TRPH	0.5	mg/L	U	0.5	2
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.8

8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.8
8/30/2004 10:40	EQUIPMENT BLANK	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.8
8/30/2004 10:00	FY13	GC-Water	Alachlor	0.58	ug/L	U	0.58	2.3
8/30/2004 10:00	FY13	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
8/30/2004 10:00	FY13	GC-Water	Atrazine	0.048	ug/L	U	0.048	0.19
8/30/2004 10:00	FY13	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.048	0.19
8/30/2004 10:00	FY13	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
8/30/2004 10:00	FY13	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
8/30/2004 10:00	FY13	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
8/30/2004 10:00	FY13	GC-Water	Chlorpyrifos Methyl	0.096	ug/L	U	0.096	0.38
8/30/2004 10:00	FY13	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.19
8/30/2004 10:00	FY13	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
8/30/2004 10:00	FY13	GC-Water	Ethoprop	0.096	ug/L	U	0.096	0.38
8/30/2004 10:00	FY13	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
8/30/2004 10:00	FY13	GC-Water	Fonofos	0.096	ug/L	U	0.096	0.38
8/30/2004 10:00	FY13	GC-Water	Hexazinone	0.096	ug/L	U	0.096	0.38
8/30/2004 10:00	FY13	GC-Water	Malathion	0.14	ug/L	U	0.14	0.56
8/30/2004 10:00	FY13	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
8/30/2004 10:00	FY13	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.9
8/30/2004 10:00	FY13	GC-Water	Metribuzin	0.096	ug/L	U	0.096	0.38
8/30/2004 10:00	FY13	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
8/30/2004 10:00	FY13	GC-Water	Naled	0.77	ug/L	UJ	0.77	3.1
8/30/2004 10:00	FY13	GC-Water	Norflurazon	0.096	ug/L	U	0.096	0.38
8/30/2004 10:00	FY13	GC-Water	Parathion Ethyl	0.14	ug/L	UJ	0.14	0.56
8/30/2004 10:00	FY13	GC-Water	Parathion Methyl	0.096	ug/L	U	0.096	0.38
8/30/2004 10:00	FY13	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
8/30/2004 10:00	FY13	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
8/30/2004 10:00	FY13	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Alachlor	0.57	ug/L	U	0.57	2.3
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Atrazine	0.048	ug/L	U	0.048	0.19
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.048	0.19
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.095	0.38
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.19
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Ethoprop	0.095	ug/L	U	0.095	0.38
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Fonofos	0.095	ug/L	U	0.095	0.38
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Hexazinone	0.095	ug/L	U	0.095	0.38
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Malathion	0.14	ug/L	U	0.14	0.56
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.9
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Metribuzin	0.095	ug/L	U	0.095	0.38
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Naled	0.76	ug/L	UJ	0.76	3
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Norflurazon	0.095	ug/L	U	0.095	0.38
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Parathion Ethyl	0.14	ug/L	UJ	0.14	0.56
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Parathion Methyl	0.095	ug/L	U	0.095	0.38
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56

8/30/2004 10:40	EQUIPMENT BLANK	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19
8/30/2004 10:00	FY13	Metals-Water	Aluminum	103	ug/L		5	20
8/30/2004 10:00	FY13	Metals-Water	Arsenic	17	ug/L	U	17	68
8/30/2004 10:00	FY13	Metals-Water	Cadmium	0.025	ug/L	U	0.025	0.1
8/30/2004 10:00	FY13	Metals-Water	Calcium	46.6	mg/L	A	0.05	0.2
8/30/2004 10:00	FY13	Metals-Water	Chromium	2	ug/L	U	2	8
8/30/2004 10:00	FY13	Metals-Water	Copper	0.96	ug/L	I	0.75	3
8/30/2004 10:00	FY13	Metals-Water	Iron	453	ug/L	A	10	40
8/30/2004 10:00	FY13	Metals-Water	Lead	3.5	ug/L	A	0.13	0.52
8/30/2004 10:00	FY13	Metals-Water	Magnesium	4.5	mg/L	A	0.02	0.08
8/30/2004 10:00	FY13	Metals-Water	Nickel	2.2	ug/L	I	2	8
8/30/2004 10:00	FY13	Metals-Water	Selenium	1	ug/L	U	1	4
8/30/2004 10:00	FY13	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
8/30/2004 10:00	FY13	Metals-Water	Zinc	4.2	ug/L	I	3	12
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Aluminum	5	ug/L	U	5	20
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Arsenic	6	ug/L	U	6	24
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Cadmium	0.025	ug/L	U	0.025	0.1
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Calcium	0.05	mg/L	U	0.05	0.2
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Chromium	2	ug/L	U	2	8
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Copper	0.75	ug/L	U	0.75	3
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Iron	10	ug/L	U	10	40
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Lead	0.05	ug/L	U	0.05	0.2
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Magnesium	0.02	mg/L	U	0.02	0.08
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Nickel	2	ug/L	U	2	8
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Selenium	1	ug/L	U	1	4
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
8/30/2004 10:40	EQUIPMENT BLANK	Metals-Water	Zinc	3	ug/L	U	3	12
8/30/2004 10:00	FY13	Nutrients-Liquid	Ammonia-N	0.025	mg N/L		0.01	0.02
8/30/2004 10:00	FY13	Nutrients-Liquid	Kjeldahl Nitrogen	0.79	mg N/L		0.06	0.2
8/30/2004 10:00	FY13	Nutrients-Liquid	NO2NO3-N	0.088	mg N/L		0.004	0.01
8/30/2004 10:00	FY13	Nutrients-Liquid	O-Phosphate-P	0.018	mg P/L		0.004	0.01
8/30/2004 10:00	FY13	Nutrients-Liquid	TSS	4	mg/L	I	4	16
8/30/2004 10:00	FY13	Nutrients-Liquid	Total-P	0.066	mg P/L		0.02	0.06
8/30/2004 10:00	FY13	Nutrients-Liquid	Turbidity	4.4	NTU	A	0.05	0.05
8/30/2004 10:40	EQUIPMENT BLANK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
8/30/2004 10:40	EQUIPMENT BLANK	Nutrients-Liquid	Kjeldahl Nitrogen	0.06	mg N/L	U	0.06	0.2
8/30/2004 10:40	EQUIPMENT BLANK	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
8/30/2004 10:40	EQUIPMENT BLANK	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
8/30/2004 10:40	EQUIPMENT BLANK	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
8/30/2004 10:00	FY13	Overflow	Oil and Grease	0.84	mg/L	I		
8/30/2004 10:40	EQUIPMENT BLANK	Overflow	Oil and Grease	0.69	mg/L	U		
8/30/2004 10:00	FY13	VOC-Water	Benzene	0.5	ug/L	U	0.5	1
8/30/2004 10:00	FY13	VOC-Water	Ethylbenzene	0.5	ug/L	U	0.5	2
8/30/2004 10:00	FY13	VOC-Water	Toluene	0.5	ug/L	U	0.5	2
8/30/2004 10:00	FY13	VOC-Water	m,p-Xylene	0.5	ug/L	U	0.5	2
8/30/2004 10:00	FY13	VOC-Water	o-Xylene	0.5	ug/L	U	0.5	2
8/30/2004 10:40	EQUIPMENT BLANK	VOC-Water	Benzene	0.5	ug/L	U	0.5	1
8/30/2004 10:40	EQUIPMENT BLANK	VOC-Water	Ethylbenzene	0.5	ug/L	U	0.5	2
8/30/2004 10:40	EQUIPMENT BLANK	VOC-Water	Toluene	0.5	ug/L	U	0.5	2
8/30/2004 10:40	EQUIPMENT BLANK	VOC-Water	m,p-Xylene	0.5	ug/L	U	0.5	2
8/30/2004 10:40	EQUIPMENT BLANK	VOC-Water	o-Xylene	0.5	ug/L	U	0.5	2

The Bioassay of MacDill Air Force Base Defense Fuel Support Industrial WWTF effluent sampled on August 30, 2004, NPDES #FL0035149.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)



The Priority Pollutants Analysis for Bioassay of MacDill Air Force Base Defense Fuel Support Industrial WWTF effluent sampled on August 30, 2004, NPDES #FL0035149.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

