GERAGHTY & MILLER, INC.
Environmental Services

64815

Ground Water *Engineering* *Hydrocarbon* *Remediation* *Education*

April 1, 1993

Caroline Kwan
U.S. Environmental Protection Agency
26 Federal Plaza Room 737
New York, New York 10278

Re: Response to Tutu Wells Site Audit Report, St. Thomas, U.S. Virgin Islands.

Dear Ms. Kwan:

Geraghty & Miller, Inc. has reviewed the U.S. Environmental Protection Agency's (USEPA's) audit report dated December 9, 1992 which was enclosed with your letter dated December 14, 1992. The report was prepared by Ms. Laura Scalise, USEPA Project Quality Assurance Officer, who was present on-site September 28 and 29, 1992.

USEPA's audit report stated that the project team "performed their respective tasks competently and according to the approved project plan." Additionally, "very few deficiencies" were found. Two items regarding missing paperwork were noted as follows:

1. Documentation of contaminant-free sample containers.
2. Documentation of analyte-free deionized water obtained from the laboratory.

In response to Item 1, please find the enclosed letter dated February 10, 1993 from Enseco Incorporated. The Work Plan (Geraghty & Miller, Inc. 1992a) and Quality Assurance Project Plan (Geraghty & Miller, Inc. 1992b), did not specify the sample bottles to be used. Accordingly, I-Chem 200 series bottles were used (I-Chem 300 series bottles have been specified for the supply well sampling only). Eagle Pitcher sample bottles were not used during the sampling; Enseco does not provide these bottles. Geraghty & Miller requested the lot number and associated quality control results for the preparation of the lots. As the enclosed letter from Enseco explains, Enseco neglected to record the lot number prior to shipment of the bottles to the site. Therefore, the exact lot quality control data is not retrievable.

To assess the potential contribution of sample container preparation to a given analytical result, the data reviewer/validator can refer to other quality control indicators (i.e., field blanks and trip blanks). Based on Geraghty & Miller's review of these quality control samples, the appropriate qualifiers have been applied during data validation.

In response to Item 2 listed above, please note the enclosed analytical results for laboratory-deionized water. With the exception of one month, Enseco performed monthly analyses of laboratory-deionized water during the period of June 1992 through October 1992.

201 West Passaic Street, 3rd Floor • Rochelle Park, New Jersey 07662 • (201) 909-0700 • FAX (201) 909-0567/0568

317

If you have any questions, please call.

Sincerely,

GERAGHTY & MILLER, INC.

Lidya Gulizia
Project Scientist/Project QA Officer

Thomas V. Danahy
Senior Scientist/Project Manager

Daniel A. Nachman
Vice President/Project Officer

c: Ana Gloria Ramos, TEIC

PR01301/siteaud.ltr/sv:df

REFERENCES

Geraghty & Miller, Inc. 1992a. Tutu Service Station Investigation Work Plan, St. Thomas, U.S. Virgin Islands. Prepared for the Tutu Environmental Investigation Committee, March 1992.

Geraghty & Miller, Inc. 1992b. Quality Assurance Project Plan, Tutu Service Station Investigation, St. Thomas, U.S. Virgin Islands. Prepared for the Tutu Environmental Investigation Committee, March 1992.

Enseco
A Corning Company

February 10, 1993

Ms. Lidya Gulizia
Geraghty & Miller, Inc.
201 West Passaic St.
Rochelle Park, NJ 07662

RE: Sample bottles

Dear Lidya,

This letter is in response of your request for I-Chem lot numbers for sample containers. During the time of the Tutu-RI Project, lot numbers provided by I-Chem were not recorded at the lab prior to shipment of the bottles to the site.

Enseco has initiated, beginning February 1st, a tracking system for all sample bottles. Prior to bottle and cooler preparation, the I-Chem lot numbers of the bottle used will be recorded on Enseco's New Bottle Chain-of-Custody. One copy of this custody is sent with the bottles and one is retained at the lab.

Enseco Fast purchases I-Chem 200 Series bottles. Bottles are pre-cleaned to I-Chem's Research Cleaning protocol's A, B and C.

If you need any additional information, please feel free to contact me at (908) 469-5800.

Sincerely,

Alicia C. Pirrocco

Alicia C. Pirrocco
Program Manager

ACP/sg

CC: R. Cohen, Enseco
D. Nazario, Enseco
T. Danahy, Geraghty & Miller, Inc.

Enseco Incorporated
2300 Cottontail Lane
Somerset, New Jersey 08875-6745
908/469-5800 Fax: 908/469-7516

Enseco
A Corning Company

MONTHLY DI ANALYSIS RECORD

MONTH: June 1992 LAB SAMPLE SITE: Sample Control

ENSECO SAMPLE #: 22622-0001 PROJECT #: 22622

WET CHEMISTRY

TEST	ACCEPTABLE LIMITS	REPORTED VALUE	UNITS	RL	DATE ANALYZED	ANALYST
SPEC. COND. (AT 25 DEGREE C)	<2.0 UMHOS	2.4 cc 2.4 lab2 ~~2.54~~	umhos/cm	2.0	7/2/92	DB
pH	5.5 - 7.5	5.4	units	0.010	6/25/92	DK
CHLORINE, RESIDUAL	<0.1 mg/L	ND (0)	mg/L	0.2	7/15/92	~~DK~~ KC
STD, PLATE COUNT	<1000 COLONIES/ ML	260	CFU/1L	20.0	6/22/92	EG
METALS						
Pb	<0.05 mg/L	ND	mg/L	0.005	6/29/92	SM/ML/KD
Cd	<0.05 mg/L			0.005		
Cr	<0.05 mg/L			0.010		
Cu	<0.05 mg/L			0.020		
Ni	<0.05 mg/L			0.040		
Zn	<0.05 mg/L			0.020		
Fe	<0.05 mg/L			0.10		
Mn	<0.05 mg/L			0.010		
Other Trace Metals(TOTAL)	<1.0 mg/L	↓	↓		↓	↓
Hg		ND	mg/L	0.0002	6/23/92	NR/GM

Comments:

Enseco
A Corning Company

TEST	ACCEPTABLE LIMITS	REPORTED VALUE	UNITS	RL	DATE ANALYZED	ANALYST
ORGANICS						
624-PP						
MeCl2		1.2	~~ug/L~~ 66 7/20/92	5.0	7/17/92	KW
Acetone		23	~~ug/L~~	5.0	↓	↓
MEK						
~~Carbon Disulfide~~		~~ND~~ 66 7/20/92				
625-PP						
a)	~~All ND.~~	All ND			7/20/92	DD
b)		↓				
c)						
d)						
608 ~~8080~~-A						
a) 4,4'-DDT		0.0002*	ug/L	0.10	6/19/92	MS
b)						
c)						
d)						
e)						

Comments: * Found in MB at 0.0016 ug/L, Reporting Limit = 0.10

Enseco
A Corning Company

MONTHLY DI ANALYSIS RECORD

MONTH: July 1992 LAB SAMPLE SITE: Sample Control

ENSECO SAMPLE #: 23381-0001 PROJECT #: 23381

WET CHEMISTRY

TEST	ACCEPTABLE LIMITS	REPORTED VALUE	UNITS	RL	DATE ANALYZED	ANALYST
SPEC. COND. (AT 25 DEGREE C)	<2.0 UMHOS	6.32	umhos/cm	2.0 ~~8/14/92~~	8/14/92	BL
pH	5.5 - 7.5	6.9	units	0.010	~~7~~/31/92	KC
CHLORINE, RESIDUAL	<0.1 mg/L	ND (0)	mg/L	0.2	8/1/92	KC
STD, PLATE COUNT	<1000 COLONIES/ ML	10.0 *	CFU/1L	2.0	7/31/92	KC
METALS						
Pb	<0.05 mg/L	ND	mg/L	0.005	8/10/92	ML/DD
Cd	<0.05 mg/L	↓	↓	0.005	↓	↓
Cr	<0.05 mg/L			0.010		
Cu	<0.05 mg/L			0.010		
Ni	<0.05 mg/L			0.040		
Zn	<0.05 mg/L			0.020		
Fe	<0.05 mg/L			0.10		
Mn	<0.05 mg/L			0.010		
Other Trace Metals(TOTAL)	<1.0 mg/L	↓			↓	
			↓			
Hg	---	ND	~~ug~~/L	0.0002	7/31/92	↓

Comments: * BLANK had 67 CFU/1L

Enseco
A Corning Company

TEST	ACCEPTABLE LIMITS	REPORTED VALUE	UNITS	RL	DATE ANALYZED	ANALYST
ORGANICS						
624-PP						
MeCl2		1.6 **	ug/L	5.0	~~7~~/29/92	JY
Acetone			↓		↓	↓
MEK						
Trichlorofluoromethane		1.0	↓	5.0	↓	↓
625-PP						
a) bis(2-Ethylhexyl Phthalate)		1.4 *	ug/L	10	8/12/92	DD
b)						
c)						
d)						
608 ~~8080~~-A						
a)	No HITS	ND	ug/L	.050/.10/.50	8/3/92	SD
b)	↓	↓	↓	↓	↓	↓
c)						
d)						
e)						

Comments: * DETECTED in MB at 6.2 ug/L.

** DETECTED in MB at 1.2 ug/L

Enseco
A Corning Company

MONTHLY DI ANALYSIS RECORD

MONTH: August 1992 LAB SAMPLE SITE: SAMPLE Control

ENSECO SAMPLE #: 24234-001 PROJECT #: 24234

WET CHEMISTRY

TEST	ACCEPTABLE LIMITS	REPORTED VALUE	UNITS	RL	DATE ANALYZED	ANALYST
SPEC. COND. (AT 25 DEGREE C)	<2.0 UMHOS	ND (1.4)	umhos/cm	2.0	8/28/92	DB
pH	5.5 - 7.5	6.1	units	0.010	8/29/92	DB
CHLORINE, RESIDUAL	<0.1 mg/L	ND (0)	mg/L	0.2	8/28/92	DB
STD, PLATE COUNT	<1000 COLONIES/ ML	100	cfu/.1L	2.0	8/30/92	KC
METALS						
Pb	<0.05 mg/L	ND	0.005	mg/L	9/9/92	SM
Cd	<0.05 mg/L		0.005			
Cr	<0.05 mg/L		0.010			
Cu	<0.05 mg/L		0.020			
Ni	<0.05 mg/L		0.040			
Zn	<0.05 mg/L		0.020			
Fe	<0.05 mg/L		0.10			
Mn	<0.05 mg/L		0.010			
Other Trace Metals(TOTAL)	<1.0 mg/L					
Hg		ND	0.0002	mg/L	9/9/92	NR

Comments:

TEST	ACCEPTABLE LIMITS	REPORTED VALUE	UNITS	RL	DATE ANALYZED	ANALYST
ORGANICS						
624-PP						
MeCl2		2.8 *	ug/L	5.0	9/3/92	JK
Acetone						
MEK						
625-PP						
a) Chrysene		1.8 *	ug/L	10.0	9/9/92	DE
b)						
c)						
d)						
CC 10/2/92 608 ~~8080-A~~						
a) All Compounds		ND	ug/L	.052, 10, .50, 1.0	9/4/92	AS
b)						
c)						
d)						
e)						

Comments: * MB contamination at 2.3 ug/L.

Enseco
A Coming Company

MONTHLY DI ANALYSIS RECORD

MONTH: October 1992 LAB SAMPLE SITE: Sample Control

ENSECO SAMPLE #: 25203-005 PROJECT #: ~~25203-005~~ CG 11/5/92

WET CHEMISTRY

TEST	ACCEPTABLE LIMITS	REPORTED VALUE	UNITS	RL	DATE ANALYZED	ANALYST
SPEC. COND. (AT 25 DEGREE C)	<2.0 UMHOS	2.45	~~umhos/cm~~	2.0	11/5/92	DB
pH	5.5 - 7.5	8.07	units	0.01	10/14/92	NB
CHLORINE, RESIDUAL	<0.1 mg/L	ND (0.0)	mg/L	1	10/14/92	EG
STD, PLATE COUNT	<1000 COLONIES/ ML	100	CFU/ml	2	10/14/92	KC
METALS						
Pb	<0.05 mg/L	ND	mg/L	0.005	10/28/92	HS
Cd	<0.05 mg/L	↓	↓	0.005	↓	↓
Cr	<0.05 mg/L			0.010		
Cu	<0.05 mg/L			0.020		
Ni	<0.05 mg/L			0.040		
Zn	<0.05 mg/L			0.020		
Fe	<0.05 mg/L			0.100		
Mn	<0.05 mg/L			0.010		
Other Trace Metals(TOTAL)	<1.0 mg/L	↓	↓		↓	↓
Hg		ND	mg/L	0.0002	10/28/92	~~AS~~ NR

CG 11/

Comments:

Enseco
A Corning Company

TEST	ACCEPTABLE LIMITS	REPORTED VALUE	UNITS	RL	DATE ANALYZED	ANALYST
ORGANICS						
624-PP						
MeCl2		ND	ug/L	5.0	10/19/92	JK
Acetone		6.4	ug/L	5.0	10/19/92	JK
MEK		ND	ug/L	5.0	↓	↓
Carbon Disulfide		1.6	ug/L	5.0	10/19/92	JK
625-PP						
a) bis(2-Ethylhexyl)Phthalate		3.0*	ug/L	10.0	10/25/92	TF
b)						
c)						
d)						
608 8080-A						
a) No PCBs		All ND	ug/L	.050-1.0	10/20/92	AS
b)						
c)						
d)						
e)						

CC 10/21/92

Comments: * Reported in MB at 11 ug/L.