APPENDIX I - SECOND ABIOTIC SURVEY LABORATORY RESULTS



LL Sample No. WW 3361902

Collected:04/10/2000 13:50

by JD

Account Number: 08367

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:22 AM

Discard: 5/25/00

SW-2 Grab Water Sample

ENTRIX, Incorporated 10 Corporate Circle

Suite 100

New Castle DE 19720

Project: Chalk Point/Pepco

SW002 SDG#: ATF55-03

CAT			As Re	ceived	As Received Method		Dilution
No.	Analysis Name	CAS Number	Resul	t	Detection Limit	Units	Factor
00273	Total Organic Carbon	n.a.	4.1		0.40	mg/l	1
	The Total Organic Carbon (TOC)	result reporte	d above	was deter	mined by		
	measuring total carbon by a pe	rsulfate digest	ion/inf	rared dete	ction method		
	on an acidified sample which h	as been purged	of inor	ganic carb	on using		
	nitrogen. It represents "non-	purgeable TOC".					
08407	STARS Petroleum Contaminants W	1					
08540	Methyl t-Butyl Ether	1634-04-4	0.9	J	0.2	ug/l	1
08541	Benzene	71-43-2	N.D.		0.2	ug/l	1
08543	Toluene	108-88-3	0.6	J	0.2	ug/l	1
08545	Ethylbenzene	100-41-4	0.4	J	0.2	ug/l	1
08547	m,p-Xylene	1330-20-7	1.5	J	0.4	ug/l	1
08550	o-Xylene	95-47-6	0.7	J	0.2	ug/l	1
08552	Isopropylbenzene (Cumene)	98-82-8	N.D.		0.2	ug/l	1
08553	n-Propylbenzene	103-65-1	0.3	J	0.2	ug/l	1
08554	1,3,5-Trimethylbenzene	108-67-8	0.4	J	0.2	ug/l	1 .
08555	tert-Butylbenzene	98-06-6	N.D.		0.2	ug/l	1
08556	1,2,4-Trimethylbenzene	95-63-6	1.5		0.2	ug/l	1
08557	sec-Butylbenzene	135-98-8	N.D.		0.2	ug/l	1
08558	p-Isopropyltoluene	99-87-6	N.D.		0.2	ug/l	1
08559	n-Butylbenzene	104-51-8	0.6	J	0.2	ug/l	1
08560	Naphthalene	91-20-3	6.7		0.2	ug/l	1

This sample was not submitted in a preserved container.

Laboratory	Chroniala
Laboratory	Chronicle

CAT			-	Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00273	Total Organic Carbon	EPA 415.1	1	04/20/2000 00:34	John L. VanLenten	1
08407	STARS Petroleum	SW-846 8021B	1	04/18/2000 17:02	Linda C. Pape	1
	Contaminants W					Ø
					•	Ø
						4



LL Sample No. WW 3361902

Collected: 04/10/2000 13:50 by JD

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:22 AM

Discard: 5/25/00

SW-2 Grab Water Sample

Project: Chalk Point/Pepco

SW002 SDG#: ATF55-03

Account Number: 08367

ENTRIX, Incorporated 10 Corporate Circle

Suite 100



LL Sample No. WW 3361918

Collected: 04/10/2000 11:20 by JD

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:23 AM

Discard: 5/25/00

SW-17 Grab Water Sample

Project: Chalk Point/Pepco

SW017 SDG#: ATF55-19

08559 n-Butylbenzene

08560 Naphthalene

11:20 by JD Account Number: 08367

ENTRIX, Incorporated 10 Corporate Circle

Suite 100

New Castle DE 19720

CAT			As Received	As Received		
	*	63.6 W. 1		Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00273	Total Organic Carbon	n.a.	5.4	0.40	mg/l	1
	The Total Organic Carbon (TOC) measuring total carbon by a per	sulfate digest	ion/infrared det	ection method		
	on an acidified sample which ha	s been purged	of inorganic car	bon using		
,	nitrogen. It represents "non-p	ourgeable TOC".				
08407	STARS Petroleum Contaminants W					
08540	Methyl t-Butyl Ether	1634-04-4	N.D.	0.2	ug/l	1
08541	Benzene	71-43-2	N.D.	0.2	ug/l	1
08543	Toluene	108-88-3	N.D.	0.2	ug/l	1
08545	Ethylbenzene	100-41-4	0,3 J	0.2	ug/l	1
08547	m,p-Xylene	1330-20-7	1.1 J	0.4	ug/l	1
08550	o-Xylene	95-47-6	0.3 J	0.2	ug/l	1
08552	Isopropylbenzene (Cumene)	98 - 82-8	N.D.	0.2	ug/l	1
08553	n-Propylbenzene	103-65-1	N.D.	0.2	ug/l	1
08554	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.2	ug/l	1
08555	tert-Butylbenzene	98-06-6	N.D.	0.2	uq/l	1
08556	1,2,4-Trimethylbenzene	95-63-6	0.2 J	0.2	ug/l	1
08557	sec-Butylbenzene	135-98-8	N.D.	0.2	ug/l	1
08558	p-Isopropyltoluene	99-87-6	N.D.	0.2	ug/l	1

This sample was not submitted in a preserved container.

Laboratory	Chronia	١.
Laboratory	Chronic	10

N.D.

CAT				Analysis	
No.	Analysis Name	Method	Trial#	Date and Time	Analyst
00273	Total Organic Carbon	EPA 415.1	1	04/20/2000 00:42	John L. VanLenten
08407	STARS Petroleum	SW-846 8021B	1	04/18/2000 07:59	Linda C. Pape
	Contaminants W				_

104-51-8

91-20-3

Dilution Factor

1

0.2

0.2

ug/l

ug/l





LL Sample No. WW 3361918

Collected:04/10/2000 11:20 by JD

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:23 AM

Discard: 5/25/00

SW-17 Grab Water Sample

Project: Chalk Point/Pepco

SW017 SDG#: ATF55-19

Account Number: 08367

ENTRIX, Incorporated 10 Corporate Circle

Suite 100



LL Sample No. WW 3361920

Collected:04/10/2000 17:45 by JD Account Number: 08367

Submitted: 04/14/2000 09:10 ENTRIX, Incorporated Reported: 05/10/00 at 01:23 AM 10 Corporate Circle

Discard: 5/25/00 Suite 100

SW-18 Grab Water Sample New Castle DE 19720

Project: Chalk Point/Pepco

SW018 SDG#: ATF55-21

			•	As Received		
CAT			As Receive	d Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00273	Total Organic Carbon	n.a.	4.5	0.40	mg/l	1
	The Total Organic Carbon (TOC)	result reporte	d above was o	determined by		
	measuring total carbon by a per	sulfate digest	ion/infrared	detection method		
	on an acidified sample which ha	s been purged	of inorganic	carbon using		
	nitrogen. It represents "non-p	urgeable TOC".				
08407	STARS Petroleum Contaminants W					
08540	Methyl t-Butyl Ether	1634-04-4	0.2 J	0.2	ug/l	1
08541	Benzene	71-43-2	N.D.	0.2	ug/l	1
08543	Toluene	108-88-3	N.D.	0.2	ug/1	1
08545	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
08547	m,p-Xylene	1330-20-7	0.6 J	0.4	ug/l	1
08550	o-Xylene	95-47-6	N.D.	0.2	ug/l	1
08552	Isopropylbenzene (Cumene)	98-82-8	N.D.	0.2	ug/l	1
08553	n-Propylbenzene	103-65-1	N.D.	0.2	ug/l	1
08554	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.2	ug/l	1
08555	tert-Butylbenzene	98-06-6	N.D.	0.2	ug/l	1
08556	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.2	ug/l	1
08557	sec-Butylbenzene	135-98-8	N.D.	0.2	ug/1	1
08558	p-Isopropyltoluene	99-87-6	N.D.	0.2	ug/l	1
08559	n-Butylbenzene	104-51-8	N.D.	0.2	ug/l	1
08560	Naphthalene	91-20-3	0.3 J	0.2	ug/l	1
	-					

This sample was not submitted in a preserved container.

Laboratory	Chron	4-1-
⊥aboratorv	Chror	ndle

CAT					
No.	Analysis Name	Method	Trial#	Date and Time	Analyst
00273	Total Organic Carbon	EPA 415.1	1	04/18/2000 16:12	John L. VanLenten
08407	STARS Petroleum	SW-846 8021B	1	04/18/2000 17:43	Linda C. Pape
,	Contaminants W		•		

Dilution Factor 1

As Pacsived



LL Sample No. WW 3361920

Collected: 04/10/2000 17:45 by JD

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:23 AM

Discard: 5/25/00

SW-18 Grab Water Sample

Project: Chalk Point/Pepco

SW018 SDG#: ATF55-21

Account Number: 08367

ENTRIX, Incorporated 10 Corporate Circle

Suite 100



LL Sample No. WW 3361922

Collected: 04/10/2000 10:40

by JD

Account Number: 08367

ENTRIX, Incorporated

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:23 AM

10 Corporate Circle Suite 100

Discard: 5/25/00

SW-19 Grab Water Sample

New Castle DE 19720

Project: Chalk Point/Pepco

SW019 SDG#: ATF55-23

				As Received		
CAT			As Recei	ved Method		Dilutio
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00273	Total Organic Carbon	n.a.	4.9	0.40	mg/l	1
	The Total Organic Carbon (TOC)	result reporte	ed above was	determined by		
	measuring total carbon by a per	rsulfate digest	ion/infrare	ed detection method		
	on an acidified sample which ha	as been purged	of inorgani	ic carbon using		
	nitrogen. It represents "non-	purgeable TOC".				
08407	STARS Petroleum Contaminants W					
08540	Methyl t-Butyl Ether	1634-04-4	0.4 J	0.2	ug/l	1
08541	Benzene	71-43-2	И.Д.	0.2	ug/l	1
08543	Toluene	108-88-3	0.2 J	0.2	ug/l	1
08545	Ethylbenzene	100-41-4	0.4 J	0.2	ug/l	1
08547	m,p-Xylene	1330-20-7	1.4 J	0.4	ug/l	1
08550	o-Xylene	95-47-6	0.6 J	0.2	ug/l	ı
08552	Isopropylbenzene (Cumene)	98-82-8	N.D.	0.2	ug/l	1
08553	n-Propylbenzene	103-65-1	0.2 J	0.2	ug/l	1
08554	1,3,5-Trimethylbenzene	108-67-8	0.4 J	0.2	ug/l	ı
08555	tert-Butylbenzene	98-06-6	N.D.	0.2	ug/l	1
08556	1,2,4-Trimethylbenzene	95-63-6	1.7	0.2	ug/l	1
08557	sec-Butylbenzene	135-98-8	N.D.	0.2	ug/l	1
08558	p-Isopropyltoluene	99-87-6	N.D.	0.2	ug/l	1
08559	n-Butylbenzene	104-51-8	0.8 J	0.2	ug/l	1
08560	Naphthalene	91-20-3	12.	0.2	ug/l	1

The sample was submitted with a collapsed septum, leaving a broken seal permitting headspace into the vial. The sample was analyzed at the request of the client.

This sample was not submitted in a preserved container.

Laboratory Chronicle

Analysis Analysis Name Method Trial# Date and Time Analyst

Factor 5 4:00

Dilution





LL Sample No. 3361922

Collected: 04/10/2000 10:40

by JD

EPA 415.1

Account Number: 08367

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:23 AM

Discard: 5/25/00

SW-19 Grab Water Sample

ENTRIX, Incorporated 10 Corporate Circle

Suite 100

New Castle DE 19720

Project: Chalk Point/Pepco

SW019 SDG#: ATF55-23

Total Organic Carbon Q8407

SW-846 8021B STARS Petroleum Contaminants W

04/18/2000 16:20 04/18/2000 18:24

John L. VanLenten

Linda C. Pape



LL Sample No. WW 3361924

Collected: 04/10/2000 15:30 by JD Account Number: 08367

Submitted: 04/14/2000 09:10 ENTRIX, Incorporated Reported: 05/10/00 at 01:23 AM 10 Corporate Circle

Discard: 5/25/00 Suite 100

SW-20 Grab Water Sample New Castle DE 19720

Project: Chalk Point/Pepco

SW020 SDG#: ATF55-25

CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00273	Total Organic Carbon	n.a.	4.3	0.40	mg/l	1
	The Total Organic Carbon (TOC) result reporte	ed above was dete	ermined by		
	measuring total carbon by a p	ersulfate digest	tion/infrared det	tection method		
	on an acidified sample which	has been purged	of inorganic car	rbon using		
	nitrogen. It represents "non	-purgeable TOC"	•			
08407	STARS Petroleum Contaminants	M				
	·					
08540	Methyl t-Butyl Ether	1634-04-4	N.D.	0.2	ug/l	1
08541	Benzene	71-43-2	N.D.	0.2	ug/l	1
08543	Toluene	108-88-3	N.D.	0.2	ug/l	1
08545	Ethylbenzene	100-41-4	N.D.	0.2	ug/l	1
08547	m,p-Xylene	1330-20-7	0.7 J	0.4	ug/l	1
08550	o-Xylene	95-47-6	N.D.	0.2	ug/l	1
08552	Isopropylbenzene (Cumene)	98-82-8	N.D.	0.2	ug/l	1
08553	n-Propylbenzene	103-65-1	N.D.	0.2	ug/l	1
08554	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.2	ug/l	1
08555	tert-Butylbenzene	98-06-6	N.D.	0.2	ug/l	1
08556	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.2	ug/l	1
08557	sec-Butylbenzene	135-98-8	N.D.	0.2	ug/l	1
08558	p-Isopropyltoluene	99-87-6	N.D.	. 0.2	ug/l	1
08559	n-Butylbenzene	104-51-8	N.D.	0.2	ug/l	1
08560	Naphthalene	91-20-3	0.4 J	0.2	ug/l	1

This sample was not submitted in a preserved container.

Laboratory	Chronicle
Laboral orv	CHIOHICLE

CAT		Analysis			
No.	Analysis Name	Method	Trial#	Date and Time	Analyst
00273	Total Organic Carbon	EPA 415.1	1	04/18/2000 16:28	John L. VanLenten
8407	STARS Petroleum	SW-846 8021B	1	04/18/2000 19:06	Linda C. Pape
,	Contaminants W				

Dilution Factor 1

As Received



LL Sample No. WW 3361924

Collected: 04/10/2000 15:30 by JD

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:23 AM

Discard: 5/25/00

SW-20 Grab Water Sample

Project: Chalk Point/Pepco

SW020 SDG#: ATF55-25

Account Number: 08367

ENTRIX, Incorporated 10 Corporate Circle

Suite 100



LL Sample No. WW 3361926

Collected:04/10/2000 16:10 by JD

Submitted: 04/14/2000 09:10 ENTRIX, Incorporated Reported: 05/10/00 at 01:23 AM 10 Corporate Circle

Discard: 5/25/00 Suite 100

SW-21 Grab Water Sample New Castle DE 19720

Project: Chalk Point/Pepco

SW021 SDG#: ATF55-27

CAT			As Rece	eived	As Received Method		Dilution
No.	Analysis Name	CAS Number	Result		Detection Limit	Units	Factor
08407	STARS Petroleum Contaminants	W					
08540	Methyl t-Butyl Ether	1634-04-4	1.5		0.2	ug/l	1
08541	Benzene	71-43-2	N.D.		0.2	ug/l	1
08543	Toluene	108-88-3	0.7	J	0.2	ug/l	1
08545	Ethylbenzene	100-41-4	0.2	J	0.2	ug/l	1
08547	m,p-Xylene	1330-20-7	0.7	J	0.4	ug/l	1
08550	o-Xylene	95-47-6	0.3	J	0.2	ug/l	1
08552	Isopropylbenzene (Cumene)	98-82-8	N.D.		0.2	ug/l	1
08553	n-Propylbenzene	103-65-1	N.D.		0.2	ug/l	1
08554	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.2	ug/l	1
08555	tert-Butylbenzene	98-06-6	N.D.		0.2	ug/l	ı
08556	1,2,4-Trimethylbenzene	95-63-6	0.5	J	0.2	ug/l	1
08557	sec-Butylbenzene	135-98-8	N.D.		0.2	ug/l	1
08558	p-Isopropyltoluene	99-87-6	N.D.		0.2	ug/l	1
08559	n-Butylbenzene	104-51-8	0.2	J	0.2	ug/l	1
08560	Naphthalene	91-20-3	1.7		0.2	ug/l	1

Laboratory Chronicle

CAT		Analysis	Dilution		
No.	Analysis Name	Method	Trial# Date and Time	Analyst	Factor
08407	STARS Petroleum	SW-846 8021B	1 04/18/2000 19:4	Linda C. Pape	1
	Contaminante W				



Account Number: 08367



LL Sample No. WW 3361928

Collected: 04/10/2000 18:30 by JD

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:23 AM

Discard: 5/25/00

SW-22 Grab Water Sample

Project: Chalk Point/Pepco

SW022 SDG#: ATF55-29

Account Number: 08367

ENTRIX, Incorporated 10 Corporate Circle

Suite 100

New Castle DE 19720

					As Received		
CAT			As Rec	eived	Method		Dilution
No.	Analysis Name	CAS Number	Result	:	Detection Limit	Units	Factor
00273	Total Organic Carbon	n.a.	5.7		0.40	mg/1	1
	The Total Organic Carbon (TOC)	esult reported	above	was determ	ined by		
	measuring total carbon by a pers	sulfate digesti	.on/infr	ared detec	tion method		
)	on an acidified sample which has	s been purged o	f inorg	anic carbo	n using		
,	nitrogen. It represents "non-pu	rgeable TOC".					
08407	STARS Petroleum Contaminants W						
08540	Methyl t-Butyl Ether	1634-04-4	0.3	J	0.2	ug/l	1
08541	Benzene	71-43-2	N.D.		0.2	ug/l	1,
08543	Toluene	108-88-3	0.2	J	0.2	ug/l	1
08545	Ethylbenzene	100-41-4	0.3	J	0.2	ug/l	1
08547	m,p-Xylene	1330-20-7	0.9	J	0.4	ug/l	1
08550	o-xylene	95-47-6	0.3	J	0.2	ug/l	1
08552	Isopropylbenzene (Cumene)	98-82-8	N.D.		0.2	ug/l	ı
08553	n-Propylbenzene	103-65-1	N.D.		0.2	ug/l	1
08554	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.2	ug/l	1
08555	tert-Butylbenzene	98-06-6	N.D.		0.2	ug/l	1
08556	1,2,4-Trimethylbenzene	95-63-6	0.3	J	0.2	ug/l	1
08557	sec-Butylbenzene	135-98-8	N.D.		0.2	ug/l	1
08558	p-Isopropyltoluene	99-87-6	N.D.		0.2	ug/l	1
08559	n-Butylbenzene	104-51-8	N.D.		0.2	ug/l	ı

This sample was not submitted in a preserved container.

91-20-3

- 1 .	~1	
Laboratory	('n~	פוסים
Habutatur v		111616

0.3

		Haboracory	CIII O	111010		
CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00273	Total Organic Carbon	EPA 415.1	1	04/18/2000 16:36	John L. VanLenten	1
8407	STARS Petroleum	SW-846 8021B	1	04/18/2000 20:29	Linda C. Pape	1
	Contaminants W					Ø
						Ø
						氧



08560 Naphthalene

0.2

ug/l



LL Sample No. WW 3361928

Collected: 04/10/2000 18:30 by JD

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:23 AM

Discard: 5/25/00

SW-22 Grab Water Sample

Project: Chalk Point/Pepco

SW022 SDG#: ATF55-29

Account Number: 08367

ENTRIX, Incorporated 10 Corporate Circle

Suite 100



LL Sample No. WW 3361930

Collected:04/10/2000 18:15

by JD

Account Number: 08367

Submitted: 04/14/2000 09:10

Reported: 05/10/00 at 01:24 AM

Discard: 5/25/00

SW-23 Grab Water Sample

ENTRIX, Incorporated 10 Corporate Circle

Suite 100

New Castle DE 19720

As Received

Project: Chalk Point/Pepco

SW023 SDG#: ATF55-31

				As Received		
CAT			As Received	Method		Dilution
No.	Analysis Name	CAS Number	Result	Detection Limit	Units	Factor
00273	Total Organic Carbon	n.a.	4.5	0.40	mg/l	ı
	The Total Organic Carbon (TOC) result reporte	ed above was d	etermined by		
	measuring total carbon by a p	ersulfate digest	ion/infrared	detection method		
	on an acidified sample which	has been purged	of inorganic	carbon using		
,	nitrogen. It represents "non	-purgeable TOC".	•			
08407	STARS Petroleum Contaminants	W				
08540	Methyl t-Butyl Ether	1634-04-4	2.7	0.2	ug/l	1
08541	Benzene	71-43-2	0.3 J	0.2	ug/l	1
08543	Toluene	108-88-3	0.9 J	0.2	ug/l	1
08545	Ethylbenzene	100-41-4	0.5 J	0.2	ug/l	1
08547	m,p-Xylene	1330-20-7	2.0	0.4	ug/l	1
08550	o-Xylene	95-47-6	1.0 J	0.2	ug/l	1
08552	Isopropylbenzene (Cumene)	98-82-8	N.D.	0.2	ug/l	1
08553	n-Propylbenzene	103-65-1	0.3 J	0.2	ug/l	1
08554	1,3,5-Trimethylbenzene	108-67-8	0.7 J	0.2	ug/l	1
08555	tert-Butylbenzene	98-06-6	N.D.	0.2	ug/l	1
08556	1,2,4-Trimethylbenzene	95-63-6	3.3	0.2	ug/l	1
08557	sec-Butylbenzene	135-98-8	0.3 J	0.2	ug/l	. 1
08558	p-Isopropyltoluene	99-87-6	0.2 J	0.2	ug/l	1
08559	n-Butylbenzene	104-51-8	1.8	0.2	ug/l	1
08560	Naphthalene	91-20-3	43.	0.2	ug/l	1

This sample was not submitted in a preserved container.

Laboratory	Chronicle
	3 1

Dilution Analysis CAT Factor Method Trial# Date and Time Analyst No. Analysis Name 04/20/2000 00:50 John L. VanLenten EPA 415.1 00273 Total Organic Carbon SW-846 8021B 04/18/2000 21:11 Linda C. Pape 1 STARS Petroleum 08407 Contaminants W S 00 00 00



LL Sample No. WW 3361930

Collected:04/10/2000 18:15 by JD

Submitted: 04/14/2000 09:10 Reported: 05/10/00 at 01:24 AM

Discard: 5/25/00

SW-23 Grab Water Sample

Project: Chalk Point/Pepco

SW023 SDG#: ATF55-31

Account Number: 08367

ENTRIX, Incorporated 10 Corporate Circle

Suite 100