#1

TAB w/ 2012 Information Request sampling and volumetric flow

Streams Not Historically Included

	avg. [conc] mg/L	L/gal	gal/min	min/hr	hr/day	day/yr	Mg/mg
Light Oil Dike Ditch Sump	1.7	3.785	8.9	60	24	365	1000000000
Wash Oil Decanter Liqour into open weir	0.109	3.785	99	60	24	365	1000000000
Rectifier/Separator Tank Liquor	81	3.785	1.25	60	24	365	1000000000
Light Oil Separator/ Decanter Tank Liquor	813.333	3.785	1.25	60	24	365	1000000000
Final Cooler Bottoms	25.333	3.785	1.3	60	24	365	1000000000
Final Cooler/Mixer Settler Blowdown	48.667	3.785	3.9	60	24	365	1000000000
Water Settling Tank to Sub tank	36	3.785	0.2	60	24	365	1000000000

Ammonia Still

	mg/L	L/gal	gal/min	min/hr	hr/day	day/yr	Mg/mg
Ammonia Still outlet	0.03	3.785	180	60	24	365	1000000000

Tar Sludge

	mg/L	L/gal	gal/day	day/yr	Mg/mg
#3/4 Tar Decanter Sludge	103.333	3.785	56.9	365	1000000000
#5 Decanter Tar Sludge	143.33	3.785	56.9	365	1000000000
T-63 Final Decanter Tar Sludge	57	3.785	2.1	365	1000000000

Drip Pots

	mg/L	L/gal	gal/day	day/yr	Mg/mg
Big Gas Holder Outlet D.P.	6.3	3.785	25	365	1000000000
COG line to flare (butterfly D.P.)	22.667	3.785	25	365	1000000000
T-50 Final Cooler Drip Pot	49.333	3.785	15	365	1000000000
T-47 Final Cooler Drip Pot	34.333	3.785	15	365	1000000000
Drip Pot on Gasoline to Boiler (boiler side)	51	3.785	2.5	365	1000000000
Exhauster to Boiler Last Drip Pot	61.333	3.785	2.5	365	1000000000
Drip Pot on Gas Suction Line @ #1 Cottrell	1.133	3.785	3	365	1000000000
Gas Blanket Line Drip Pot #3 @ Long Bldg.	91	3.785	2	365	1000000000
Light Oil Drip Pot Gas Blanket Return @ Rectifie	81.333	3.785	2	365	1000000000

	mg/L	L/gal	gal/day	day/yr	Mg/mg
Gas Seals					
Under Gas Flare Seal	34.667	3.785	25	365	1000000000
Seal in Pit at Little Holder	19.667	3.785	3	365	1000000000
#5 Block 2nd Seal	15	3.785	20	365	1000000000
Total TAB	**2.768569816**				

TAB	Notes
0.030099561	included b/c open to atmosphere
0.021467572	included b/c open to atmosphere before reaching ammonia stills
0.201426345	Enters into Muck tank, which hasn't been monitored at 500 ppm
2.022551771	Enters into Muck tank, which hasn't been monitored at 500 ppm
0.06551658	enters into sub tank, which does not qualify under Subpart L
0.377589947	enters into sub tank, which does not qualify under Subpart L
0.014323651	enters into sub tank, which does not qualify under Subpart L
2.732975428	

TAB	
0.010742738	Historically on TAB
0.010742738	

TAB
0.00812288
0.011266995
0.000165369
0.019555244

TAB
0.00021759
0.000782876
0.001022322
0.000711478
0.000176144
0.000211833
4.6958E-06
0.000251438
0.000224727
0.003603104

TAB

0.001197333

8.15114E-05

0.000414458

0.001693302

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GUARDIAN SYSTEMS, INC.

1108 Ashville Road
P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Sloss Industries Corporation
P.O. Box 5327
Birmingham, AL 35207

Report Date: 1/19/09
Receive Date: 1/09/09
Receive Time: 13:00

Attention: Mr. Charles Jones

Control No : 0901-00094 Sample # 001
Sampler : JB
Sample ID : Ammonia Stills #2&3

Sample Date: 1/08/09
Sample Time: 11:45

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Cyanide (Total)	3.7	mg/L	TLB 1/12/09	13:00	335.2	(1)
Phenolics(4AAP)	290.2	mg/L	MJN 1/16/09	8:00	420.1	(1)
Method 624 (BETX Only)			CFS 1/15/09	16:22		
Benzene	<2.0	ug/L	CFS 1/15/09	16:22	624	(1)
Ethylbenzene(624)	<2.0	ug/L	CFS 1/15/09	16:22	624	(1)
Toluene	<2.0	ug/L	CFS 1/15/09	16:22	624	(1)
Xylenes, Total	<2.0	ug/L	CFS 1/15/09	16:22	624	(1)
EPA Method 625			JRD 1/15/09	12:00		
Acenaphthene	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
Acenaphthylene	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
Anthracene	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
Benzo(a)anthracene	573.	ug/L	JRD 1/15/09	12:00	625	(1)
Benzo(b)fluoranthene	235.	ug/L	JRD 1/15/09	12:00	625	(1)
Benzo(k)fluoranthene	166.	ug/L	JRD 1/15/09	12:00	625	(1)
Benzo(ghi)perylene	142.	ug/L	JRD 1/15/09	12:00	625	(1)
Benzo(a)pyrene	247.	ug/L	JRD 1/15/09	12:00	625	(1)
Bis(2-chloroethoxy)methane	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
Bis(2-chloroethyl)ether	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
Bis(2-chloroisopropyl)ether	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
Bis(2-ethylhexyl) phthalate	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
4-Bromophenyl phenyl ether	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
Benzyl butyl phthalate	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
4-Chloro-3-methylphenol	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
2-Chloronaphthalene	<50.	ug/L	JRD 1/15/09	12:00	625	(1)
2-Chlorophenol	<50.	ug/L	JRD 1/15/09	12:00	625	(1)

This Certificate Is Continued On Next Page.

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

GUARDIAN SYSTEMS, INC.

1108 Ashville Road
P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Report Date: 2/18/09
Receive Date: 2/05/09
Receive Time: 14:30

Sloss Industries Corporation
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 0902-00069 Sample # 001
Sampler : JB
Sample ID : Ammonia Still

Sample Date: 2/05/09
Sample Time: 11:10

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Cyanide (Total)	3.4	mg/L	TLB 2/12/09	14:00	335.2	(1)
Phenolics(4AAP)	328.7	mg/L	MJN 2/10/09	10:40	420.1	(1)
Method 624 (BETX Only)			CFS 2/14/09	10:33		
Benzene	<4.0	ug/L	CFS 2/14/09	10:33	624	(1)
Ethylbenzene(624)	<4.0	ug/L	CFS 2/14/09	10:33	624	(1)
Toluene	<4.0	ug/L	CFS 2/14/09	10:33	624	(1)
Xylenes, Total	<4.0	ug/L	CFS 2/14/09	10:33	624	(1)
EPA Method 625			JRD 2/17/09	19:35		
Acenaphthene	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
Acenaphthylene	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
Anthracene	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
Benzo(a)anthracene	123.	ug/L	JRD 2/17/09	19:35	625	(1)
Benzo(b)fluoranthene	141.	ug/L	JRD 2/17/09	19:35	625	(1)
Benzo(k)fluoranthene	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
Benzo(ghi)perylene	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
Benzo(a)pyrene	82.	ug/L	JRD 2/17/09	19:35	625	(1)
Bis(2-chloroethoxy)methane	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
Bis(2-chloroethyl)ether	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
Bis(2-chloroisopropyl)ether	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
Bis(2-ethylhexyl) phthalate	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
4-Bromophenyl phenyl ether	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
Benzyl butyl phthalate	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
4-Chloro-3-methylphenol	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
2-Chloronaphthalene	<50.	ug/L	JRD 2/17/09	19:35	625	(1)
2-Chlorophenol	<50.	ug/L	JRD 2/17/09	19:35	625	(1)

This Certificate Is Continued On Next Page.

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

GUARDIAN SYSTEMS, INC.

1108 Ashville Road
P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Sloss Industries Corporation
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/12/09
Receive Date: 3/05/09
Receive Time: 12:20

Attention: Mr. Charles Jones

Control No : 0903-00056 Sample # 001
Sampler : JB
Sample ID : March 09 Ammonia Still

Sample Date: 3/05/09
Sample Time: 10:20

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Cyanide (Total)	1.9	mg/L	TLB 3/06/09	13:30	335.2	(1)
Phenolics(4AAP)	417.	mg/L	MJN 3/06/09	8:45	420.1	(1)
Method 624 (BETX Only)			CFS 3/10/09	5:36		
Benzene	<20.	ug/L	CFS 3/10/09	5:36	624	(1)
Ethylbenzene(624)	<20.	ug/L	CFS 3/10/09	5:36	624	(1)
Toluene	<20.	ug/L	CFS 3/10/09	5:36	624	(1)
Xylenes, Total	<20.	ug/L	CFS 3/10/09	5:36	624	(1)
EPA Method 625			JRD 3/12/09	3:01		
Acenaphthene	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
Acenaphthylene	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
Anthracene	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
Benzo(a)anthracene	163.	ug/L	JRD 3/12/09	3:01	625	(1)
Benzo(b)fluoranthene	174.	ug/L	JRD 3/12/09	3:01	625	(1)
Benzo(k)fluoranthene	56.	ug/L	JRD 3/12/09	3:01	625	(1)
Benzo(ghi)perylene	62.	ug/L	JRD 3/12/09	3:01	625	(1)
Benzo(a)pyrene	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
Bis(2-chloroethoxy)methane	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
Bis(2-chloroethyl)ether	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
Bis(2-chloroisopropyl)ether	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
Bis(2-ethylhexyl) phthalate	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
4-Bromophenyl phenyl ether	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
Benzyl butyl phthalate	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
4-Chloro-3-methylphenol	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
2-Chloronaphthalene	<50.	ug/L	JRD 3/12/09	3:01	625	(1)
2-Chlorophenol	<50.	ug/L	JRD 3/12/09	3:01	625	(1)

This Certificate Is Continued On Next Page.

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
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(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

GUARDIAN SYSTEMS, INC.

1108 Ashville Road
P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Report Date: 4/15/09
Receive Date: 4/02/09
Receive Time: 12:15

Sloss Industries Corporation
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Sample Date: 4/02/09
Sample Time: 10:55

Control No : 0904-00037 Sample # 001
Sampler : JB
Sample ID : April 09 Ammonia Stills 1 & 2

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Cyanide (Total)	2.2	mg/L	TLB 4/10/09	11:00	335.2	(1)
Phenolics(4AAP)	586.4	mg/L	MJN 4/10/09	13:50	420.1	(1)
Method 624 (BETX Only)			CFS 4/14/09	3:38		
Benzene	<2,000.	ug/L	CFS 4/14/09	3:38	624	(1)
Ethylbenzene(624)	<2,000.	ug/L	CFS 4/14/09	3:38	624	(1)
Toluene	<2,000.	ug/L	CFS 4/14/09	3:38	624	(1)
Xylenes, Total	<2,000.	ug/L	CFS 4/14/09	3:38	624	(1)
EPA Method 625			JRD 4/07/09	14:41		
Acenaphthene	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
Acenaphthylene	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
Anthracene	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
Benzo(a)anthracene	505.	ug/L	JRD 4/07/09	14:41	625	(1)
Benzo(b)fluoranthene	485.	ug/L	JRD 4/07/09	14:41	625	(1)
Benzo(k)fluoranthene	150.	ug/L	JRD 4/07/09	14:41	625	(1)
Benzo(ghi)perylene	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
Benzo(a)pyrene	341.	ug/L	JRD 4/07/09	14:41	625	(1)
Bis(2-chloroethoxy)methane	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
Bis(2-chloroethyl)ether	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
Bis(2-chloroisopropyl)ether	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
Bis(2-ethylhexyl) phthalate	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
4-Bromophenyl phenyl ether	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
Benzyl butyl phthalate	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
4-Chloro-3-methylphenol	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
2-Chloronaphthalene	<50.	ug/L	JRD 4/07/09	14:41	625	(1)
2-Chlorophenol	<50.	ug/L	JRD 4/07/09	14:41	625	(1)

This Certificate Is Continued On Next Page.

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
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(4) 1987 ASTM Annual Standards
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GUARDIAN SYSTEMS, INC.

1108 Ashville Road
P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Sloss Industries Corporation
P.O. Box 5327
Birmingham, AL 35207

Report Date: 5/18/09
Receive Date: 5/07/09
Receive Time: 12:35

Attention: Mr. Charles Jones

Control No : 0905-00099 Sample # 001
Sampler : JB
Sample ID : Ammonia Still

Sample Date: 5/07/09
Sample Time: 11:05

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL	DATE	TIME	METHOD	
Cyanide (Total)	0.85	mg/L	TLB	5/15/09	16:55	335.2	(1)
Phenolics(4AAP)	412.9	mg/L	MJN	5/14/09	10:35	420.1	(1)
Method 624 (BETX Only)			OS	5/12/09	16:40		
Benzene	<2.0	ug/L	OS	5/12/09	16:40	624	(1)
Ethylbenzene(624)	<2.0	ug/L	OS	5/12/09	16:40	624	(1)
Toluene	<5.0	ug/L	OS	5/12/09	16:40	624	(1)
Xylenes, Total	<2.0	ug/L	OS	5/12/09	16:40	624	(1)
EPA Method 625			JRD	5/14/09	15:21		
Acenaphthene	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
Acenaphthylene	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
Anthracene	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
Benzo(a)anthracene	146.	ug/L	JRD	5/14/09	15:21	625	(1)
Benzo(b)fluoranthene	147.	ug/L	JRD	5/14/09	15:21	625	(1)
Benzo(k)fluoranthene	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
Benzo(ghi)perylene	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
Benzo(a)pyrene	84.	ug/L	JRD	5/14/09	15:21	625	(1)
Bis(2-chloroethoxy)methane	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
Bis(2-chloroethyl)ether	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
Bis(2-chloroisopropyl)ether	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
Bis(2-ethylhexyl) phthalate	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
4-Bromophenyl phenyl ether	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
Benzyl butyl phthalate	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
4-Chloro-3-methylphenol	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
2-Chloronaphthalene	<50.	ug/L	JRD	5/14/09	15:21	625	(1)
2-Chlorophenol	<50.	ug/L	JRD	5/14/09	15:21	625	(1)

This Certificate Is Continued On Next Page.

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
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(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

GUARDIAN SYSTEMS, INC.

1108 Ashville Road
P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Report Date: 6/17/09
Receive Date: 6/04/09
Receive Time: 12:20

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Sample Date: 6/04/09
Sample Time: 11:10

Control No : 0906-00076 Sample # 001
Sampler : JB
Sample ID : June 09 Ammonia Still

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Cyanide (Total)	2.4	mg/L	TLB 6/08/09	11:55	335.4	(1)
Phenolics(4AAP)	310.	mg/L	MJN 6/05/09	7:30	420.1	(1)
Method 624 (BETX Only)			AW 6/05/09	13:00		
Benzene	<2.0	ug/L	AW 6/05/09	13:00	624	(1)
Ethylbenzene(624)	<2.0	ug/L	AW 6/05/09	13:00	624	(1)
Toluene	<2.0	ug/L	AW 6/05/09	13:00	624	(1)
Xylenes, Total	2.55	ug/L	AW 6/05/09	13:00	624	(1)
EPA Method 625			JRD 6/16/09	23:26		
Acenaphthene	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
Acenaphthylene	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
Anthracene	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
Benzo(a)anthracene	117.	ug/L	JRD 6/16/09	23:26	625	(1)
Benzo(b)fluoranthene	87.	ug/L	JRD 6/16/09	23:26	625	(1)
Benzo(k)fluoranthene	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
Benzo(ghi)perylene	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
Benzo(a)pyrene	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
Bis(2-chloroethoxy)methane	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
Bis(2-chloroethyl)ether	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
Bis(2-chloroisopropyl)ether	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
Bis(2-ethylhexyl) phthalate	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
4-Bromophenyl phenyl ether	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
Benzyl butyl phthalate	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
4-Chloro-3-methylphenol	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
2-Chloronaphthalene	<50.	ug/L	JRD 6/16/09	23:26	625	(1)
2-Chlorophenol	<50.	ug/L	JRD 6/16/09	23:26	625	(1)

This Certificate Is Continued On Next Page.

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for Chemical Analysis of Water and Wastes EPA-600/4-88/039, Revised July 1991, August 1995

GUARDIAN SYSTEMS, INC.

1108 Ashville Road
P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 7/16/09
Receive Date: 7/02/09
Receive Time: 12:35

Attention: Mr. Charles Jones

Control No : 0907-00037 Sample # 001
Sampler : JB
Sample ID : July 09 Ammonia Still

Sample Date: 7/02/09
Sample Time: 9:45

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL	DATE	TIME	METHOD	
Cyanide (Total)	1.9	mg/L	TLB	7/10/09	15:55	335.4	(1)
Phenolics(4AAP)	416.	mg/L	MJN	7/15/09	13:30	420.1	(1)
Method 624 (BETX Only)			AW	7/15/09	22:53		
Benzene	<2.0	ug/L	AW	7/15/09	22:53	624	(1)
Ethylbenzene(624)	<2.0	ug/L	AW	7/15/09	22:53	624	(1)
Toluene	<2.0	ug/L	AW	7/15/09	22:53	624	(1)
Xylenes, Total	<2.0	ug/L	AW	7/15/09	22:53	624	(1)
EPA Method 625			JRD	7/11/09	0:52		
Acenaphthene	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
Acenaphthylene	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
Anthracene	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
Benzo(a)anthracene	89.	ug/L	JRD	7/11/09	0:52	625	(1)
Benzo(b)fluoranthene	74.	ug/L	JRD	7/11/09	0:52	625	(1)
Benzo(k)fluoranthene	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
Benzo(ghi)perylene	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
Benzo(a)pyrene	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
Bis(2-chloroethoxy)methane	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
Bis(2-chloroethyl)ether	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
Bis(2-chloroisopropyl)ether	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
Bis(2-ethylhexyl) phthalate	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
4-Bromophenyl phenyl ether	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
Benzyl butyl phthalate	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
4-Chloro-3-methylphenol	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
2-Chloronaphthalene	<50.	ug/L	JRD	7/11/09	0:52	625	(1)
2-Chlorophenol	<50.	ug/L	JRD	7/11/09	0:52	625	(1)

This Certificate Is Continued On Next Page

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#

Lee Mack

2008 Subpart FF
CAF/CC

Sloss Effluent - DSN 0018
and Conc. For Influent in to B
Use 1/2 detection lim

	MGD		Million Gal/Month	ug/L Conc. B
JAN -	.463	31	14.353	$2.5\times10^{-}$
$\bar{x}$ Feb -	0.528	(29)	15.312	$2.5\times10^{-}$
Mar	.473	31	14.663	$1.0\times10^{-}$
Apr	.433	30	12.99	$1.0\times10^{-}$
May	.474	31	14.694	1.0×10^{-9}
Jun	.460	30	12.0	1.0×10^{-9}
Jul	.392	31	12.152	1.0×10^{-9}
Aug	.408	31	12.648	2.5×10^{-9}
Sep	.338	30	10.14	10×10^{-9}
Oct	.392	31	12.152	3.7×10^{-9}
Nov	.348	30	10.44	1×10^{-9}
Dec	.459	31	14.229	5×10^{-9}

Gramc benzene = Gals water × 8.34 × 453.59 × Conc. Benzene

J. 463000 Gals × 8.34 × 453.59 × 2.5×10^{-9} = 4.37 gram benzene × 31 = 135 g Benzene

3782.94 F 528 MMG × 8.34 × 453.59 × 2.5×10^{-9} = 5.0 gram benzene × 29 = 145 g "

M 473 MMG × 3782.94 × 1×10^{-9} = 1.78 g Benzene × 31 = 55.2 g Benzene

A 433 MMG × 3782.94 × 1×10^{-9} = 1.64 g Benzene × 30 = 49.2 g Benzene

M 474 MMG × 3782.94 × 1×10^{-9} = 1.79 g Benzene × 31 = 55.5 g Benzene

J 460 MMG × 3783 × 1×10^{-9} = 1.74 g Benzene × 30 = 52.2 g Benzene

J 392 MMG × 3783 × 1×10^{-9} = 1.48 g Benzene × 31 = 45.88 g Benzene

A 408 MMG × 3783 × 2.5×10^{-9} = 3.86 g Benzene × 31 = 119.66 g Benzene

S 10.14 MMG × 3783 × 10×10^{-9} = ——— = 38.36 g Benzene

O 12.152 MMG × 3783 × 3.7×10^{-9} = ——— = 39.5 g Benzene

N 10.44 MMG × 3783 × 1.0×10^{-9} = ——— = 269 g Benzene

D 14.229 MMG × 3783 × 5.0×10^{-9} = ——— = 1349 [illegible] 0.0135 MG

2008 001 B Effluent Conc. For Benzene

Jan	10-Jan	187
Feb	8-Feb	190
Mar	10-Mar	207
Apr	3-Apr	190
May	12-May	200
Jun	6-Jun	180
Jul	11-Jul	190
Aug	7-Aug	200
Sep	4-Sep	187
Oct	6-Oct	180
Nov	7-Nov	210
Dec	9-Dec	190

Monthly Quench Water Analysis mg/L

	3/4 Battery TSS	3/4 Battery TDS	5 Battery TSS	5 Battery TDS
Jan	28	202	49	141
Feb	18	234	42	146
Mar	15	227	21	140
Apr	85	201	37	137
May	25	219	71	127
Jun	38	204	66	138
Jul	43	211	59	146
Jul	20	236	15	116
Aug	51	228	38	148
Sep	9	242	50	122
Oct	23	178	24	95
Nov	54	206	25	150
Dec	58	212	124	146

Effluent Benzene Concentrations

use 1/2 detection limit for Benzene Concentration

Average Sulfur Content of Fuel Oil for BTF

N/a

Average Heat Content of Fuel Oil for BTF

N/A BTU/gal

Annual average monthly organic pollutant concentrations of wastewater streams entering BTF

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		2.5×10^{-9}	2.5×10^{-9}	1×10^{-9}	1×10^{-9}	1×10^{-9}	1×10^{-9}	1×10^{-9}	2.5×10^{-9}	10×10^{-9}	3.75×10^{-9}	1×10^{-9}	5×10^{-9}
Benzene	(ug/L)	<5	<5	<2	<2	<2	<2	<2	5	<20	3.7	<2	<10
Ethylbenzene	(ug/L)	<5	<5	<2	<2	<2	<2	<2	<2	<20	<2	<2	<10
Toluene	(ug/L)	<5	<5	<2	<5	<5	<2	<2	10	<20	3.1	<2	<10
Xylene	(ug/L)	<15	<5	<2	<3	<2	<2	<2	2	<20	3	<2	<10
Cyanide	(mg/L)	<.02	2	2.1	2.5	2	1.5	0.75	1.4	1.6	1.9	1.4	2.1
o-Cresol	(ug/L)	11343	17618	23153	10514	4411	7319	3352	5414	3553	6022	5698	612
m,p-Cresol	(ug/L)	37794	63411	62584	40973	19109	27937	16173	21850	15632	26833	26089	2938
Naphthalene	(ug/L)	53	<50	419	<50	<50	<50	<50	967	<50	883	260	84
Phenolics	(mg/L)	216	298	278	311	328.7	207	152	237	141	179	288.2	194

Flow-weighted average benzene concentration for the monitored stream

ug/L

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From CY 2009 Prod. Emission Rpt.

Annual average monthly organic pollutant concentrations of ammonia still effluent

		Jan	Feb	Mar	Apr	May	Jun
Benzene	(ug/L)	<2	<4	<20	<2000	<2	<2
Ethylbenzene	(ug/L)	<2	<4	<20	<2000	<2	<2
Toluene	(ug/L)	<2	<4	<20	<2000	<2	<2
Xylene	(ug/L)	<2	<4	<20	<2000	<2	<2
Cyanide	(mg/L)	3.7	3.4	1.9	2.2	0.85	2.4
o-Cresol	(ug/L)	4472.0	16475.0	6823.0	19010.0	10101.0	7864.0
m,p-Cresol	(ug/L)	7948.0	62626.0	28311.0	44792.0	36698.0	16832.0
Naphthalene	(ug/L)	<50	<50	<50	<50	<50	<50
Phenolics	(mg/L)	290.2	328.7	417.0	586.4	412.9	310.0

#7

Flow-weighted average benzene concentration for the ammonia still effluent

1.71 ug/L (2.7*.6321) 2009 production/2008 production = .6321

The average annual concentration for benzene is assumed to be equal to the flow-weighted average for this stream based on the consistent operation of the coke plant by-products process.

Total Subpart FF Benzene = 0.1132 MG for 2008 * 0.6321 0.072 MG/yr

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#9

Kipin Tally of Recycle Material
For 2008

Charles Jones

From: Kipin Industries Inc. [kipin@kipin.com]
Sent: Monday, January 26, 2009 10:37 AM
To: Charles Jones
Subject: Kipin Tons Processed

Here is the information requested.

Invoice #	*Date*	*Tons*	*Shippers #*	*Price per Ton*	
5928	11/21/2008	14.40	3042	165.00	2,376.00
5928	11/21/2008	9.77	3043	165.00	1,612.05
5872	7/18/2008	17.12	2931	165.00	2,824.80
5845	5/30/2008	13.53	2874	165.00	2,232.45
5821	4/30/2008	12.79	2835	165.00	2,110.35
5821	4/30/2008	6.36	2836	165.00	1,049.40
		73.97			

For Sub Part FF

MG Benzene - 2008

- Use 330 ppm Benzene - same as decanter Sludge

73.97 Ton = 147,940 lbs = 67,104,104 gram
x 300 x 10^-6 (300 ppm) Benzene

20,131 gram Benzene

= 0.020 MG Benzene

Pam
Kipin Industries, Inc.
4194 Green Garden Road
Aliquippa, PA 15001
724-495-6200
fax: 724-495-2219
email: kipin@kipin.com

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#6

GUARDIAN SYSTEMS, INC.

1108 Ashville Road
P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 1/07/10
Receive Date: 12/31/09
Receive Time: 12:25

Attention: Mr. Charles Jones

Control No : 0912-00374 Sample # 001
Sampler : Client
Sample ID : 210

Sample Date: 12/30/09
Sample Time: 12:30

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	12.	mg/L	CFS 1/06/10	12:03	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

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Wats 866/729-7211
Fax 205/699-3882

Report Date: 1/07/10
Receive Date: 12/31/09
Receive Time: 12:25

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 0912-00374 Sample # 002
Sampler : Client
Sample ID : 209

Sample Date: 12/30/09
Sample Time: 12:30

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	11.	mg/L	CFS 1/06/10	12:43	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
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Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 1/07/10
Receive Date: 12/31/09
Receive Time: 12:25

Attention: Mr. Charles Jones

Control No : 0912-00374 Sample # 003
Sampler : Client
Sample ID : 208

Sample Date: 12/30/09
Sample Time: 12:30

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	11.	mg/L	CFS 1/06/10	13:24	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
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Wats 866/729-7211
Fax 205/699-3882

Report Date: 1/07/10
Receive Date: 12/31/09
Receive Time: 12:25

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Sample Date: 12/30/09
Sample Time: 12:30

Control No : 0912-00374 Sample # 004
Sampler : Client
Sample ID : 217

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	20.	mg/L	CFS 1/06/10	14:04	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
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Wats 866/729-7211
Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 1/07/10
Receive Date: 12/31/09
Receive Time: 12:25

Attention: Mr. Charles Jones

Control No : 0912-00374 Sample # 005
Sampler : Client
Sample ID : 214

Sample Date: 12/30/09
Sample Time: 12:30

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	28.	mg/L	CFS 1/06/10	14:44	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
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(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Report Date: 1/07/10
Receive Date: 12/31/09
Receive Time: 12:25

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 0912-00374 Sample # 006
Sampler : Client
Sample ID : 216

Sample Date: 12/30/09
Sample Time: 13:15

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	27.	mg/L	CFS 1/06/10	15:24	8260	(3)

Approved by: _____

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
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(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 1/07/10
Receive Date: 12/31/09
Receive Time: 12:25

Attention: Mr. Charles Jones

Control No : 0912-00374 Sample # 007
Sampler : Client
Sample ID : 218

Sample Date: 12/30/09
Sample Time: 13:15

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	16.	mg/L	CFS 1/06/10	16:04	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
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Report Date: 1/07/10
Receive Date: 12/31/09
Receive Time: 12:25

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 0912-00374 Sample # 008
Sampler : Client
Sample ID : 224

Sample Date: 12/30/09
Sample Time: 13:15

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	30.	mg/L	CFS 1/06/10	16:45	8260	(3)

Approved by: _____

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
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(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Leeds, Alabama 35094

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Wats 866/729-7211
Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 1/07/10
Receive Date: 12/31/09
Receive Time: 12:25

Attention: Mr. Charles Jones

Control No : 0912-00374 Sample # 009
Sampler : Client
Sample ID : 225

Sample Date: 12/30/09
Sample Time: 13:15

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	23.	mg/L	CFS 1/06/10	17:25	8260	(3)

Approved by: _____

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
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(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

Guardian Systems, Inc.
1108 Ashville Road, P. O. Box 190
Leeds, Alabama 35094
(205) 699-6647
Watts: (866) 729-7211
email: gsi@gsilab.com

Chain of Custody Record/ Analysis Report

(205) 699-3882 Fax
www.gsilab.com

Client: Charles Jones
Company: Walter Coke, Inc.
Address: P.O. Box 5327
B'ham AL 35207

Phone: (205) 808-7712
Fax: (205) 808-7975
P.O.#:
Project: COG Condensate Seals + Drip Pots

Sample ID or Bottle#	Sample Description	Sample Date	Sample Time	Sample Comp.*	Sample Grab	Bottle Glass	Bottle Plastic	Sample Preservative HCl	HNO_3	H_2SO_4	NaOH	Cool 4°C	Other**	Analysis Requested: Benzene
210		30 Dec 09	12:30											
209														
208														
217														
214			1:15											
216														
218														
224														
225														

Sampled by: Client
Received by (SIGN / PRINT): Jeff Blair Date: 31 Dec 09 Time: 11:50
Received by: Date: Time:
Received for Laboratory by: Lori Brymer Date: 12/31/09 Time: 1225
Was Shipped Container intact when received? Yes NA No ___ Initials ___
Were all samples properly preserved? Yes NA No ___ Initials ___
Comments:

Relinquished by: Ken Lambert Date: 31 Dec 09 Time: 11:50
Relinquished by: Jeff Blair Date: 31 Dec 09 Time: 12:25
Relinquished by: Date: Time:
Seals intact? Yes NA No ___
Sample temp. 4 °C

Put an "X" in the appropriate column for sample type and sample preservative. Write in analysis requested.
* For **composite samples** include start and stop date and time in comments section **Write in preservative used in comments

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#

GUARDIAN SYSTEMS, INC.

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P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Control No : 1002-00303 Sample # 001
Sampler : Client
Sample ID : 201- Big Gas Holder Inlet Seal

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	15,778.	ug/L	CFS 3/03/10	18:36	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 002
Sampler : Client
Sample ID : 203- Seal at Big Holder going to Gas Flar

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	44,209.	ug/L	CFS 3/03/10	19:16	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
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Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 003
Sampler : Client
Sample ID : 204- Seal going to Big Holder between the Tracks

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	12,389.	ug/L	CFS 3/03/10	19:56	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
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Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 004
Sampler : Client
Sample ID : 205- 2nd Seal on Gas line going to Gas Flare

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	32,662.	ug/L	CFS 3/09/10	18:44	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
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(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
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Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 005
Sampler : Client
Sample ID : 206- 1st Drip pot on Gas Blanket line going to Weak Liquor Tanks

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	42,162.	ug/L	CFS 3/03/10	21:16	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Sample Date: 2/24/10
Sample Time: 0:00

Control No : 1002-00303 Sample # 006
Sampler : Client
Sample ID : 207- 2nd Drip pon on Gas Blanket line going to Weak Liquor Tanks

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	43,087.	ug/L	CFS 3/03/10	21:56	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 007
Sampler : Client
Sample ID : 208- Little Holder Gas Seal

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	12,488.	ug/L	CFS 3/03/10	22:36	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 16th, 18th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 008
Sampler : Client
Sample ID : 209- 3 Block Gas Seal at Little Holder

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	11,286.	ug/L	CFS 3/03/10	23:16	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Control No : 1002-00303 Sample # 009
Sampler : Client
Sample ID : 210- 4&5 Block Gas at Little Holder

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL	DATE	TIME	METHOD	
Benzene	13,327.	ug/L	CFS	3/03/10	23:56	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 010
Sampler : Client
Sample ID : 211- T-50 Final Cooler Drip Pot

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	29,754.	ug/L	CFS 3/04/10	0:36	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 011
Sampler : Client
Sample ID : 212- T-47 Final Cooler Drip Pot

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL	DATE	TIME	METHOD	
Benzene	2,886.	ug/L	CFS	3/09/10	19:24	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 012
Sampler : Client
Sample ID : 213- Seal in Pit at Little Holder for Gas line to Exhauster Bldg

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	13,635.	ug/L	CFS 3/04/10	1:16	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for ~~Chemical~~ Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 16th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 013
Sampler : Client
Sample ID : 214- 1st Drip pon on gas line to Exhauster Bldg

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	35,028.	ug/L	CFS 3/04/10	1:56	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
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Telephone 205/ 699-6647
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Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Sample Date: 2/24/10
Sample Time: 0:00

Control No : 1002-00303 Sample # 015
Sampler : Client
Sample ID : 216- 2nd Drip on on gas line to Exhauster Bldg

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	47,411.	ug/L	CFS 3/04/10	2:36	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

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Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 016
Sampler : Client
Sample ID : 217- 3rd Drip Pot on gas line going to Exhauster Bldg

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	134.	ug/L	CFS 3/04/10	18:24	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water. EPA-600/4-88/039, Revised July 1991, August 1995
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Telephone 205/ 699-6647
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Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 017
Sampler : Client
Sample ID : 218- Drip Pot on gas line going to Exhauster Bldg

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL	DATE	TIME	METHOD	
Benzene	11,587.	ug/L	CFS	3/04/10	19:04	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Wats 866/729-7211
Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 018
Sampler : Client
Sample ID : 219- 1 & 2 Exhauster Seal

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL	DATE	TIME	METHOD	
Benzene	18,262.	ug/L	CFS	3/04/10	19:44	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Sample Date: 2/24/10
Sample Time: 0:00

Control No : 1002-00303 Sample # 019
Sampler : Client
Sample ID : 220- 5 Block Gas Line Seal

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	22,528.	ug/L	CFS 3/04/10	20:24	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

GUARDIAN SYSTEMS, INC.

1108 Ashville Road
P.O. Box 190
Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 020
Sampler : Client
Sample ID : 222- Drip Pot on gas line to Boiler house across from Door Room

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL	DATE	TIME	METHOD	
Benzene	94,261.	ug/L	CFS	3/04/10	21:04	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
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Wats 866/729-7211
Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Sample Date: 2/24/10
Sample Time: 0:00

Control No : 1002-00303 Sample # 021
Sampler : Client
Sample ID : 223- Drip pot on gas line to Boiler House at E-Tanks South Side

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	42,119.	ug/L	CFS 3/04/10	21:45	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
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Wats 866/729-7211
Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 022
Sampler : Client
Sample ID : 224- Drip Pot on gas line to Boiler House at E-Tank North Side

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL	DATE	TIME	METHOD	
Benzene	51,395.	ug/L	CFS	3/05/10	14:28	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

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Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 023
Sampler : Client
Sample ID : 225- Last Drip pot going to Boiler House

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	36,959.	ug/L	CFS 3/05/10	15:29	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
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(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

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Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 024
Sampler : Client
Sample ID : 226- 3 Block Gas Seal

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	13,846,	ug/L	CFS 3/05/10	16:09	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

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Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 025
Sampler : Client
Sample ID : 227- 3 & 4 Block Gas Seal

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL	DATE	TIME	METHOD	
Benzene	16,567.	ug/L	CFS	3/05/10	16:49	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

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Leeds, Alabama 35094

Telephone 205/ 699-6647
Wats 866/729-7211
Fax 205/699-3882

Walter Coke, Inc
P.O. Box 5327
Birmingham, AL 35207

Report Date: 3/10/10
Receive Date: 2/24/10
Receive Time: 12:05

Attention: Mr. Charles Jones

Control No : 1002-00303 Sample # 026
Sampler : Client
Sample ID : 228- 5 Block Gas Seal

Sample Date: 2/24/10
Sample Time: 0:00

LABORATORY CERTIFICATE

PARAMETER	RESULTS	UNITS	ANAL DATE	TIME	METHOD	
Benzene	25,110.	ug/L	CFS 3/05/10	17:28	8260	(3)

Approved by:

METHOD REFERENCES

(1) Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-20, revised March 1983, August 1993, May 1994
(2) Standard Methods for the Examination of Water and Waste Water, 18th, 19th, and 20th Edition, 1998
(3) Test Methods for Evaluating Solid Wastes Physical Chemical Method SW-846, 3rd Edition, Updated IV December 1996
(4) 1987 ASTM Annual Standards
(5) Code of Federal Regulations, Title 40, Part 136, Appendix A, Revised July 1995
(6) Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039, Revised July 1991, August 1995
(7) NIOSH Manual of Analytical Methods, 4th Edition, May 1996

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Watts: (866) 729-7211
email: gsi@gsilab.com

(205) 699-3882 Fax
www.gsilab.com

Chain of Custody Record/ Analysis Report

Client: Charles Jones
Company: Walter Coke
Address:

Phone:
Fax:
P.O.#:
Project: Benzene Monitoring

Sample ID or Bottle#	Sample Description	Sample Date	Sample Time	Sample: Comp.*	Sample: Grab	Bottle: Glass	Bottle: Plastic	Sample Preservative: HCl	HNO_3	H_2SO_4	NaOH	Cool 4°C	Other **	Analysis Requested					
201	Gas Seals + Drip Pots	24 Feb 10	N/A																
203																			
204																			
205																			
206																			
207																			
208																			
209																			
210																			
211																			
212																			
213																			
214																			

Sampled by: Client
Received by (PRINT / SIGN): Jeff Blan Date: 24 Feb 10 Time: 11:25
Received by: Date: Time:
Received for Laboratory by: Lisa Bryant Date: 24 Feb 10 Time: 1205
Was Shipped Container intact when received? Yes ✓ No ___ Initials JB
Were all samples properly preserved? Yes ✓ No ___ Initials JB
Relinquished by: Date: Time:
Relinquished by: Jeff Blan Date: 24 Feb 10 Time: 12:05
Relinquished by: Date: Time:
Seals intact? Yes NA No ___
Sample temp. 4 °C
Comments:

Put an "X" in the appropriate column for sample type and sample preservative. Write in analysis requested.
* For **composite samples** include start and stop date and time in comments section **Write in preservative used in comments

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Chain of Custody Record/ Analysis Report

(205) 699-3882 Fax
www.gsilab.com

Client: Charles Jones
Company: Walter Coke
Address:

Phone:
Fax:
P.O.#:
Project: Benzene Monitoring

Sample ID or Bottle#	Sample Description	Sample Date	Sample Time	Sample: Comp.*	Sample: Grab	Bottle: Glass	Bottle: Plastic	Sample Preservative: HCl	HNO_3	H_2SO_4	NaOH	Cool 4°C	Other **	Analysis Requested					
215	Gas Seals + Drip Pots	24 Feb 10	N/A																
216														NO SAMPLE					
217																			
218																			
219																			
220																			
222																			
223																			
224																			
225																			
226																			
227																			
228																			

Sampled by: Client
Received by (PRINT / SIGN): Jeff Blair Date: 24 Feb 10 Time: 11:25
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Jeff Blair Date: 24 Feb 10 Time: 12:05
Received for Laboratory by: Ken Brymer Date: 24 Feb 10 Time: 1205
Relinquished by: Date: Time:
Was Shipped Container intact when received? Yes ✓ No ___ Initials KB
Seals intact? Yes NS No ___
Were all samples properly preserved? Yes ✓ No ___ Initials KB
Sample temp. 4 °C
Comments:

Put an "X" in the appropriate column for sample type and sample preservative. Write in analysis requested.
* For **composite samples** include start and stop date and time in comments section **Write in preservative used in comments

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#

CY 2008 Subpart FF Benzene Calculations

COKE OVEN GAS CONDENSATE

DRIP POTS:
Oven Blvd (4)…100 GPD
Boiler House (2)…10 GPD
Big Gas Holder (3)…100 GPD
Little Gas Holder (3)…35 GPD
Sulfate (1)…50 GPD
Final Cooler (2)…30 GPD
Exhauster (3)…30 GPD

Total…355 GPD x 8.34 lbs/gal x 366 days x 13.8 ppm benzene = 14.95 lbs benzene x 453.59 g/lb = 6781 grams benzene = 0.0068 MG benzene

TAR DECANTER SLUDGE

Average 40 bags per day @ 30 pounds per bag….1200 pounds per day x 366= 439,200 1bs x 453.59 x 0.000300 (300 ppm) = 59765 grams

= 0.059765 MG benzene

OTHER COKE PLANT DERIVED MATERIAL

Average 20 bags per day @ 30 pounds per bag….600 pounds per day x 366 = 219600 lbs
X 453.59 g/lb = 99608364 grams
X 300 ppm benzene = 29882 grams benzene
= 0.030 MG benzene

Coal Tar Recycling 2008 at Kipin/ABC…. 73.79 tons w/ 300 ppm benzene
= 0.020 MG benzene

BTF Influent Benzene (DSN 001B) / Ammonia Still – 2008
= 0.0014 MG Benzene

Total = O.1180 MG benzene for 2008

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CY 2009 Subpart FF Benzene Calculations

COKE OVEN CONDENSATE

DRIP POTS:
Oven Blvd (4)…100 GPD
Boiler House (2)…10 GPD
Big Gas Holder (3)…100 GPD
Little Gas Holder (3)…35 GPD
Sulfate (1)…50 GPD
Final Cooler (2)…30 GPD
Exhauster (3)…30 GPD
Total = 355 GPD

Total…355 GPD x 8.34 lbs/gal x 366 days x 13.8 ppm benzene = 14.95 lbs benzene x 453.59 g/lb = 6781 grams benzene = 0.0068 MG benzene (2008)
2009 / 2008 - Ratio of 34 / 18 drip pots and gas seals = 1.89;
2009 / 2008 - Ratio of 25.5 ppm benzene / 13.8 ppm benzene = 1.85
2009 / 2008 – Ratio of production rate = 0.6321
2009 = 0.0068 MG/Y benzene (2008) X 1.89 X 1.85 X 0.6321 = 0.015 MG / Y

TAR DECANTER SLUDGE
Average 40 bags per day @ 30 pounds per bag =1200 pounds per day x 366 days/yr = 439,200 1bs/yr
439,200 1bs/yr x 453.59g/lb x 0.000300 (300 ppm) = 59765 grams/yr
2009 = 0.059765 MG benzene X 0.6321(Ratio of 2009/208 Prod. Rate) = 0.038 MG/Y

OTHER COKE PLANT DERIVED MATERIAL
Average 20 bags per day @ 30 pounds per bag….600 pounds per day x 366 = 219600 lbs
X 453.59 g/lb = 99608364 grams X 300 ppm benzene = 29882 grams benzene
= 0.030 MG benzene (2008)
2009 = 0.030 MG X 0.6321(Ratio of 2009/2008 Prod. Rate) = 0.019 MG/Y

Coal Tar Recycling 2009 at Kipin/ABC….Zero benzene in 2009
= 0.0 MG benzene

BTF Influent Benzene (DSN 001B) / Ammonia Still
2009– (same as 2008)
= 0.0014 MG Benzene

Total = O.073 MG benzene for 2009

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#

	A	B	C	D	E	F	G	H	I	J
1	**TAB w/ 2012 Information Request sampling and volumetric flow**									
2										
3		**avg. [conc]**								
4	**Streams Not Historically Included**	**mg/L**	**L/gal**	**gal/min**	**min/hr**	**hr/day**	**day/yr**	**Mg/mg**	**TAB**	**Notes**
5	Light Oil Dike Ditch Sump	1.7	3.785	8.9	60	24	365	1000000000	0.030099561	included b/c open to atmosphere
6	Wash Oil Decanter Liqour into open weir	0.109	3.785	99	60	24	365	1000000000	0.021467572	included b/c open to atmosphere before reaching ammonia stills
7	Rectifier/Separator Tank Liquor	81	3.785	1.25	60	24	365	1000000000	0.201426345	Enters into Muck tank, which hasn't been monitored at 500 ppm
8	Light Oil Separator/ Decanter Tank Liquor	813.333	3.785	1.25	60	24	365	1000000000	2.022551771	Enters into Muck tank, which hasn't been monitored at 500 ppm
9	Final Cooler Bottoms	25.333	3.785	1.3	60	24	365	1000000000	0.06551658	enters into sub tank, which does not qualify under Subpart L
10	Final Cooler/Mixer Settler Blowdown	48.667	3.785	3.9	60	24	365	1000000000	0.377589947	enters into sub tank, which does not qualify under Subpart L
11	Water Settling Tank to Sub tank	36	3.785	0.2	60	24	365	1000000000	0.014323651	enters into sub tank, which does not qualify under Subpart L
12									**2.732975428**	
13										
14	**Ammonia Still**	**mg/L**	**L/gal**	**gal/min**	**min/hr**	**hr/day**	**day/yr**	**Mg/mg**	**TAB**	
15	Ammonia Still outlet	0.03	3.785	180	60	24	365	1000000000	0.010742738	Historically on TAB
16									**0.010742738**	
17										
18	**Tar Sludge**	**mg/L**	**L/gal**	**gal/day**	**day/yr**			**Mg/mg**	**TAB**	
19	#3/4 Tar Decanter Sludge	103.333	3.785	56.9	365			1000000000	0.00812288	
20	#5 Decanter Tar Sludge	143.33	3.785	56.9	365			1000000000	0.011266995	
21	T-63 Final Decanter Tar Sludge	57	3.785	2.1	365			1000000000	0.000165369	
22									**0.019555244**	
23										
24	**Drip Pots**	**mg/L**	**L/gal**	**gal/day**	**day/yr**			**Mg/mg**	**TAB**	
25	Big Gas Holder Outlet D.P.	6.3	3.785	25	365			1000000000	0.00021759	
26	COG line to flare (butterfly D.P.)	22.667	3.785	25	365			1000000000	0.000782876	
27	T-50 Final Cooler Drip Pot	49.333	3.785	15	365			1000000000	0.001022322	
28	T-47 Final Cooler Drip Pot	34.333	3.785	15	365			1000000000	0.000711478	
29	Drip Pot on Gasoline to Boiler (boiler side)	51	3.785	2.5	365			1000000000	0.000176144	
30	Exhauster to Boiler Last Drip Pot	61.333	3.785	2.5	365			1000000000	0.000211833	
31	Drip Pot on Gas Suction Line @ #1 Cottrell	1.133	3.785	3	365			1000000000	4.6958E-06	
32	Gas Blanket Line Drip Pot #3 @ Long Bldg.	91	3.785	2	365			1000000000	0.000251438	
33	Light Oil Drip Pot Gas Blanket Return @ Rectifie	81.333	3.785	2	365			1000000000	0.000224727	
34									**0.003603104**	
35										
36	**Gas Seals**	**mg/L**	**L/gal**	**gal/day**	**day/yr**			**Mg/mg**	**TAB**	
37	Under Gas Flare Seal	34.667	3.785	25	365			1000000000	0.001197333	
38	Seal in Pit at Little Holder	19.667	3.785	3	365			1000000000	8.15114E-05	
39	#5 Block 2nd Seal	15	3.785	20	365			1000000000	0.000414458	
40									**0.001693302**	
41										
42	**Total TAB**	**2.768569816**								
43										
44										
45									0.06551658	
46									0.377589947	
47									0.014323651	
48									0.006326279	
49									0.019555244	
50									0.003603104	
51									0.001693302	
									0.488608107	

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2												
3	**WC Sampled Locations Spring 2012**	**mg/L**	**L/gal**	**gal/min**	**min/hr**	**hr/day**	**day/yr**	**Mg/mg**	**TAB**	**NOTES**		
4	Exhaust Building Basement Sump	0.937	3.785	1.3	60	24	365	1E+09	0.00242328			
5	Water Draw from Tar Storage Tanks	25.333	3.785	6.5	60	24	365	1E+09	0.3275829			
6	Ammonia Still Inlet	28.333	3.785	106	60	24	365	1E+09	5.97474903	106 gpm compared to 180 gpm on provided flow diagram		
7	Ammonia Still Inlet	28.333	3.785	180	60	24	365	1E+09	10.1458002	using 180 gpm flowrate		
8												
9	**NEIC Sample [ ] Fall 2011**											
10	Exhaust Building Basement Sump	0.08	3.785	1.3	60	24	365	1E+09	0.0002069			
11	Water Draw from Tar Storage Tanks	20.8	3.785	6.5	60	24	365	1E+09	0.26896634			
12	Ammonia Still Inlet (WC flowrate)	43	3.785	106	60	24	365	1E+09	9.06766697	106 gpm compared to 180 gpm on provided flow diagram		
13	Ammonia Still Inlet (flowrate provided to NEIC)	43	3.785	180	60	24	365	1E+09	15.397925	using 180 gpm flowrate		
14												
15	**Walter Coke Sample [ ] Fall 2011**											
16	Exhaust Building Basement Sump	0.177	3.785	1.3	60	24	365	1E+09	0.00045776			
17	Water Draw from Tar Storage Tanks	21.333	3.785	6.5	60	24	365	1E+09	0.2758586			
18	Ammonia Still Inlet (WC flowrate)	41	3.785	106	60	24	365	1E+09	8.64591502	106 gpm compared to 180 gpm on provided flow diagram		
19	Ammonia Still Inlet (flowrate provided to NEIC)	41	3.785	180	60	24	365	1E+09	14.6817425	using 180 gpm flowrate		

	A
1	
2	**Drip Pots Not Sampled**
3	1st Drip Pot at Weak ammonia Liquor Tanks
4	2nd Drip Pot at Weak Ammonia Liquor Tanks
5	1st Drip Pot to Exhauster Buidling
6	2nd Drip Pot to Exhauster Bldg.
7	3rd Drip Pot to Exhauster Bldg.
8	Drip Pot on Line into Exhauster Building
9	Gas Blanket Line Drip Pot #1 Before Pressure Controller
10	Gas Blanket Line Drip Pot #2 Return Line @ Muck Tank
11	
12	**Seals Not Sampled**
13	Slittle Holder Seal
14	#3 Block Gas Seal at Little Holder
15	#4 &#5 Block Gas Seal at Little Holder
16	Ms. Daisy Seal
17	#1 and #2 Exhauster Seal
18	#5 Block Gasline to Boiler (oven side)
19	#3 Block Seal
20	#4 Block Seal
21	#5 Block 1st Seal
22	
23	**Muck Tank**
24	Muck Tank Clean Out (only occasionally)

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#1

	mg/L	L/gal	gal/min	min/hr	hr/day	day/yr	Mg/mg	TAB
WC Sampled Streams Spring 2012								
Exhaust Building Basement Sump	0.937	3.785	1.3	60	24	365	1E+09	0.00242328
Water Draw from Tar Storage Tanks	25.333	3.785	6.5	60	24	365	1E+09	0.3275829
Ammonia Still Inlet	28.333	3.785	106	60	24	365	1E+09	5.97474903
NEIC Sample [ ] Fall 2011								
Exhaust Building Basement Sump	0.08	3.785	1.3	60	24	365	1E+09	0.0002069
Water Draw from Tar Storage Tanks	20.8	3.785	6.5	60	24	365	1E+09	0.26896634
Ammonia Still Inlet (WC flowrate)	43	3.785	106	60	24	365	1E+09	9.06766697
Ammonia Still Inlet (flowrate provided to NEIC)	43	3.785	180	60	24	365	1E+09	15.397925
Walter Coke Sample [ ] Fall 2011								
Exhaust Building Basement Sump	0.08	3.785	1.3	60	24	365	1E+09	0.0002069
Water Draw from Tar Storage Tanks	20.8	3.785	6.5	60	24	365	1E+09	0.26896634
Ammonia Still Inlet (WC flowrate)	43	3.785	106	60	24	365	1E+09	9.06766697
Ammonia Still Inlet (flowrate provided to NEIC)	43	3.785	180	60	24	365	1E+09	15.397925

	A	B	C	D	E	F	G	H	I
1									
2									
3	**WC Sampled Streams Spring 2012**	**mg/L**	**L/gal**	**gal/min**	**min/hr**	**hr/day**	**day/yr**	**Mg/mg**	**TAB**
4	Exhaust Building Basement Sump	0.937	3.785	1.3	60	24	365	1E+09	0.00242328
5	Water Draw from Tar Storage Tanks	25.333	3.785	6.5	60	24	365	1E+09	0.3275829
6	Ammonia Still Inlet	28.333	3.785	106	60	24	365	1E+09	5.97474903
7									
8	**NEIC Sample [ ] Fall 2011**								
9	Exhaust Building Basement Sump	0.08	3.785	1.3	60	24	365	1E+09	0.0002069
10	Water Draw from Tar Storage Tanks	20.8	3.785	6.5	60	24	365	1E+09	0.26896634
11	Ammonia Still Inlet (WC flowrate)	43	3.785	106	60	24	365	1E+09	9.06766697
12	Ammonia Still Inlet (flowrate provided to NEIC)	43	3.785	180	60	24	365	1E+09	15.397925
13									
14	**Walter Coke Sample [ ] Fall 2011**								
15	Exhaust Building Basement Sump	0.08	3.785	1.3	60	24	365	1E+09	0.0002069
16	Water Draw from Tar Storage Tanks	20.8	3.785	6.5	60	24	365	1E+09	0.26896634
17	Ammonia Still Inlet (WC flowrate)	43	3.785	106	60	24	365	1E+09	9.06766697
18	Ammonia Still Inlet (flowrate provided to NEIC)	43	3.785	180	60	24	365	1E+09	15.397925

	A
1	
2	**Drip Pots Not Sampled**
3	1st Drip Pot at Weak ammonia Liquor Tanks
4	2nd Drip Pot at Weak Ammonia Liquor Tanks
5	1st Drip Pot to Exhauster Buidling
6	2nd Drip Pot to Exhauster Bldg.
7	3rd Drip Pot to Exhauster Bldg.
8	Drip Pot on Line into Exhauster Building
9	Gas Blanket Line Drip Pot #1 Before Pressure Controller
10	Gas Blanket Line Drip Pot #2 Return Line @ Muck Tank
11	
12	**Seals Not Sampled**
13	Slittle Holder Seal
14	#3 Block Gas Seal at Little Holder
15	#4 &#5 Block Gas Seal at Little Holder
16	Ms. Daisy Seal
17	#1 and #2 Exhauster Seal
18	#5 Block Gasline to Boiler (oven side)
19	#3 Block SEAl
20	#4 Block Seal
21	#5 Block 1st Seal