epl	ate Data: K3	C2F						
	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak	
#	ug/L	ug/L	Signal	Area	Height		Stored	
1	0.003	0.003	-0.0000	0.0008	0.0002	00:08:14	Yes	
2	-0.019	-0.019	-0.0002	-0.0009	0.0000	00:08:45	Yes	
lean:	-0.008	-0.008	-0.0001					`
D:	0.015	0.015	0.0001					,
RSD:	195.7	195.7	134.53					/
						========	======	
	nce No.: 242 D: K3C2M				Autosa Date (	ampler Locat Collected: 1	ion: 47 2/2/2008	0:09:05
nalys					Data :	Type: Origin	al	
enlic	cate Data: K3							
epiic epl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak	
#	ug/L	ug/L	Signal	Area	Height		Stored	
1	-0.016	-0.016	-0.0001	-0.0018	_	00:09:58	Yes	
2	0.035	0.035	0.0002	0.0027	0.0004	00:10:28/	Yes	
∠ 1ean:		0.009	0.0000					
aean. SD:	0.036	0.036	0.0002					
RSD:	384.3	384.3	621.07					_
	J04.J	JU #.J	021.07				. (	12/2/08
	=========		=======================================	<del>/</del> -5£	\=======	ampler Locat	=======	=======================================
	nce No.: 243			lΟ	Date (	ampler Locat Collected: 1	2/2/2008	0:10:49
Analys				-		Type: Origin		
					<i></i> _			
_	cate Data: K3		<b>51.1.6</b>	7	, Danie	Time	Peak	
Repl	SampleConc			Peak/	Peak	Time	Stored	
#	ug/L	ug/L	Signal	Area	Height	00 11 11		
1	-0.018	-0.018	-0.0001	,	0.0000	00:11:41	Yes	
2	0.002	0.002	-0.0000	<b>7</b> .0009	0.0002	00:12:12	Yes	
Mean:	-0.008	-0.008	-0.0001	/				
SD:	0.014	0.014	0.0001					
₹RSD:	170.3	170.3	118.55					
			.====/=====		=======	======== ampler Locat	:======= :ion: 6	=======================================
	=======================================				Autos	ambrer nocac		0.12.22
Sequer Sample	nce No.: 244 e ID: CCV					Collected: 1 Type: Origin		0:12:33
Seque: Sample	nce No.: 244 e ID: CCV							
Sequer Sample Analy: Replie	nce No.: 244 e ID: CCV st: cate Data: C	cv /	BlnkCorr	Peak	Data			
Sequer Sample Analy: Replic Repli	nce No.: 244 e ID: CCV st: cate Data: CC SampleConc	CV StnøConc	BlnkCorr	Peak Area	Data  Peak	Type: Origin		· 
Sequer Sample Analy: Replic Repl	nce No.: 244 e ID: CCV st: cate Data: CC SampleConc	CV StnaConc ug/L	Signal	Area	Data Peak Height	Type: Origin	Peak	· 
Sequer Sample Analy: Replic Repl #	nce No.: 244 e ID: CCV st: cate Data: CC SampleConc ug/L 5.675	Stnaconc ug/L 5.675	<b>Signal</b> 0.0390	<b>Area</b> 0.1773	Peak Height 0.0391	Type: Origin Time 00:13:27	Peak Stored	· 
Sequer Sample Analys Replic Repl # 1 2	nce No.: 244 e ID: CCV st: cate Data: CC SampleConc ug/L 5.675 5.674	StnaConc ug/L 5/.675 5.674	<b>Signal</b> 0.0390 0.0389	<b>Area</b> 0.1773	Data Peak Height	Type: Origin	Peak Stored Yes	· 
Sequer Sample Analy: Replic Repl # 1 2 Mean:	nce No.: 244 e ID: CCV st: cate Data: CC SampleConc ug/L 5.675 5.674 5.674	StnaConc ug/L 5/.675 5.674 5.674	<b>Signal</b> 0.0390 0.0389 0.0389	<b>Area</b> 0.1773	Peak Height 0.0391	Type: Origin Time 00:13:27	Peak Stored Yes	· 
Sequer Sample Analy: 	nce No.: 244 e ID: CCV st:  cate Data: CC     SampleConc     ug/L     5.675     5.674     5.674     0.001	StnaConc ug/L 5/.675 5.674 5.674 0.001	<b>Signal</b> 0.0390 0.0389 0.0389 0.0000	<b>Area</b> 0.1773	Peak Height 0.0391	Type: Origin Time 00:13:27	Peak Stored Yes	· 
Sequer Sample Analy: Replic Repl # 1 2 Mean: SD: %RSD:	nce No.: 244 e ID: CCV st: cate Data: CC     SampleConc     ug/L     5.675     5.674     5.674     0.001     0.013	StneConc ug/L 5/.675 5.674 5.674 0.001	Signal 0.0390 0.0389 0.0389 0.0000 0.01	<b>Area</b> 0.1773 0.1776	Peak Height 0.0391 0.0391	Type: Origin Time 00:13:27 00:13:57	Peak Stored Yes	· 
Sequer Sample Analy: Replic Replic Hean: 2 Mean: SD: %RSD:	nce No.: 244 e ID: CCV st:  cate Data: CC     SampleConc     ug/L     5.675     5.674     5.674     0.001	StnaConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits fo	Signal 0.0390 0.0389 0.0389 0.0000 0.01	<b>Area</b> 0.1773 0.1776	Peak Height 0.0391 0.0391	Type: Origin Time 00:13:27 00:13:57	Peak Stored Yes	· 
Sequer Sample Analy: Replicate 1 2 Mean: SD: &RSD: QC All a:	cate Data: Co SampleConc ug/L 5.675 5.674 0.001 0.013 value within	StndConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits fo	Signal 0.0390 0.0389 0.0389 0.0000 0.01 or Hg 253.7	<b>Area</b> 0.1773 0.1776  Recover	Peak Height 0.0391 0.0391	Type: Origin  Time  00:13:27 00:13:57	Peak Stored Yes Yes	
Sequer Sample Analy: Replid Repl 1 2 Mean: SD: QC All a:	cate Data: Co SampleConc ug/L 5.675 5.674 0.001 0.013 value within nalyte(s) pas	StndConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits fo	Signal 0.0390 0.0389 0.0389 0.0000 0.01 or Hg 253.7	<b>Area</b> 0.1773 0.1776  Recover	Peak Height 0.0391 0.0391	Type: Origin  Time  00:13:27 00:13:57	Peak Stored Yes Yes	
Sequer Sample Analy: Replid Repl 1 2 Mean: SD: QC All a: Seque: Sample	cate Data: CC SampleConc ug/L 5.675 5.674 0.001 0.013 value within nalyte(s) passence No.: 245 e ID: CCB	StndConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits fo	Signal 0.0390 0.0389 0.0389 0.0000 0.01 or Hg 253.7	<b>Area</b> 0.1773 0.1776  Recover	Peak Height 0.0391 0.0391	Time  00:13:27 00:13:57  49%	Peak Stored Yes Yes Yes 1 22/2/2008	
Sequer Sample Analy: Replid Repl 1 2 Mean: SD: QC All a:	cate Data: CC SampleConc ug/L 5.675 5.674 0.001 0.013 value within nalyte(s) passence No.: 245 e ID: CCB	StndConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits fo	Signal 0.0390 0.0389 0.0389 0.0000 0.01 or Hg 253.7	<b>Area</b> 0.1773 0.1776  Recover	Peak Height 0.0391 0.0391	Type: Origin  Time  00:13:27 00:13:57	Peak Stored Yes Yes Yes 1 22/2/2008	
Sequer Sample Analy: Replid Repl 1 2 Mean: SD: ResD: QC All a: Seque: Sample Analy	cate Data: CC sampleConc ug/L 5.675 5.674 0.001 0.013 value within nalyte(s) pas	StndConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits fo	Signal 0.0390 0.0389 0.0389 0.0000 0.01 or Hg 253.7	<b>Area</b> 0.1773 0.1776  Recover	Peak Height 0.0391 0.0391	Time  00:13:27 00:13:57  49%	Peak Stored Yes Yes Yes 1 22/2/2008	
Sequer Sample Analy: Replid Repl 1 2 Mean: SD: %RSD: QC All a: Seque: Sampl Analy	cate Data: CC SampleConc ug/L 5.675 5.674 0.001 0.013 value within nalyte(s) passence No.: 245 e ID: CCB	StnaConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits for seed QC.	Signal 0.0390 0.0389 0.0389 0.0000 0.01 or Hg 253.7	<b>Area</b> 0.1773 0.1776  Recover	Peak Height 0.0391 0.0391	Time  00:13:27 00:13:57  49%	Peak Stored Yes Yes  ion: 1 12/2/2008 hal	0:14:18
Sequer Sample Analy: Replide Replide Sobre Sobre Sample Analy Replide Replide	cate Data: Co SampleConc ug/L 5.675 5.674 0.001 0.013 value within nalyte(s) parallel error No.: 245 e ID: CCB st:	StnaConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits for seed QC.	Signal 0.0390 0.0389 0.0389 0.0000 0.01 or Hg 253.7	Area 0.1773 0.1776  Recover	Peak Height 0.0391 0.0391 Ty = 113.  Autos Data  Peak Height	Time  00:13:27 00:13:57  49%  =================================	Peak Stored Yes Yes Yes Lion: 1 L2/2/2008 hal	0:14:18
Sequer Sample Analy: 	cate Data: Co SampleConc ug/L 5.675 5.674 0.001 0.013 value within nalyte(9) passes e ID: CCB st:	StndConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits for seed QC.	Signal 0.0390 0.0389 0.0389 0.0000 0.01 or Hg 253.7	Area 0.1773 0.1776 Recover	Peak Height 0.0391 0.0391 Ty = 113.  Autos Data  Peak Height 0.0002	Time  00:13:27 00:13:57  49%  =================================	Peak Stored Yes Yes Lion: 1 L2/2/2008 hal  Peak Stored Yes	0:14:18
Sequer Sample Analy: Replider Replider SD: %RSD: QC All a: Sequer Sample Analy Replider Replider	cate Data: Co SampleConcug/L 5.675 5.674 0.001 0.013 value within malyte(s) passes ince No.: 245 e ID: CCB st:	StndConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits for seed QC.	Signal 0.0390 0.0389 0.0389 0.0000 0.01 or Hg 253.7	Area 0.1773 0.1776 Recover	Peak Height 0.0391 0.0391 Ty = 113.  Autos Data  Peak Height	Time  00:13:27 00:13:57  49%  =================================	Peak Stored Yes Yes Yes Lion: 1 L2/2/2008 hal	0:14:18
Sequers Sample Analy:  Replication Replica	cate Data: Construction of the construction of	StndConc ug/L 5.675 5.674 5.674 0.001 0.013 n limits for seed QC.	Signal 0.0390 0.0389 0.0389 0.0000 0.01 or Hg 253.7 BlnkCorr Signal 0.0001	Area 0.1773 0.1776 Recover	Peak Height 0.0391 0.0391 Ty = 113.  Autos Data  Peak Height 0.0002	Time  00:13:27 00:13:57  49%  =================================	Peak Stored Yes Yes Lion: 1 L2/2/2008 hal  Peak Stored Yes	0:14:18

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TestAmerica

Date: 12/2/2008 0:23:55

%RSD: 399.9 399.9 >999.9% value within limit Not calculated All analyte(s) passed OC. \_\_\_\_\_\_\_ Sequence No.: 246 Autosampler Location: 49 Sample ID: K3DF9 Date Collected: 12/2/2008 0:16:00 Analyst: Data Type: Original Replicate Data: K3DF9 Repl SampleConc StndConc BlnkCorr Peak Peak Time Peak ug/L ug/L Signal Area Height Stored 1 0.015 0.015 0.0001 0.0020 0.0003 00:16:53 Yes 2 0.031 0.031 0.0002 0.0028 0.0004 00:17:24 Yes Mean: 0.023 0.023 0.0001 SD: 0.012 0.012 0.0001 %RSD: 50.33 50.33 59.51 Sequence No.: 247 Autosampler Location 50 Sample ID: K3PKFB Date Collected: 12/2/2008 0:17:44 Analyst: Data Type: Original Replicate Data: K3PKFB Repl SampleConc StndConc BlnkCorr Peak Peak Tizne Peak 12/2/08 # ug/L ug/L Signal Area Height Stored 1 0.010 0.010 0.0000 0.0019 00:18:38 0.0002 Yes 2 0.036 0.036 0.0002 0.0023 0.0004 00:19:08 Yes Mean: 0.023 0.023 0.0001 SD: 0.019 0.019 0.0001 %RSD: 80.33 80.33 94.90 Sequence No.: 248 Autosampler Location: 51 Sample ID: K3PKFC Date Collected: 12/2/2008 0:19:29 Analyst: Data Type: Original Replicate Data: K3PKFC Repl SampleConc StndConc BlnkCorr Peak Peak Time Peak # ug/L ug/L Signa/1 Area Height Stored 1 5.891 5.891 0.04/04 0.1840 0.0406 00:20:23 Yes 2 5.874 5.874 0403 0.1809 0.0405 00:20:53 Ves 5.883 Mean: 5.883 .0404 SD: 0.012 0.012 0.0001 %RSD: 0.209 0.21 0.209 Sequence No.: 249 Autosampler Location: 52 Sample ID: K3PKFL Date Collected: 12/2/2008 0:21:14 Analyst: Data Type: Original Replicate Data: K3/PKFL Rep1 SampleCong StndConc BlnkCorr Peak Peak Time Peak ug/L ug/L Signal Area Height Stored 5.804 1 5.804 0.0398 0.1817 0.0400 00:22:07 Yes 2 5.783 5.783 0.0397 0.1802 0.0399 00:22:37 Yes 5.793 5.793 Mean: 0.0398 SD: 0.01A0.014 0.0001 %RSD: 0.250 0.25 \_\_\_\_\_\_ Sequence No.: 250 Autosampler Location: 53 Sample ID: K3C5R Date Collected: 12/2/2008 0:23:00 Analyst: Data Type: Original

TestAmerica

Replicate Data: K3C5R

ethod	: He				Page 56		D	Date: 12/2/	2008 0:31:38
lepl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak		
#	ug/L	ug/L	Signal	Area	Height		Stored		\
1	0.012	0.012	0.0001	0.0025	0.0002	00:23:53	Yes		
2	0.013	0.013	0.0001	0.0000	0.0002	00:24:25	Yes		
ean:	0.013	0.013	0.0001						
D:	0.001	0.001	0.0000						
RSD:	4.064	4.064	5.65						
									·========
	ce No.: 251 ID: K3C5RS				Date (	ampler Locat Collected: 1	.2/2/2008	0:24:46	
nalys	t:				Data 1	Type: Origin	al /		
eplic epl	ate Data: K3 SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak		
#	ug/L	ug/L	Signal	Area	Height		Stored		
1	5.920	5.920	0.0406	0.1869	0.0408	00:25:40	Yes		
2	5.854	5.854	0.0402	0.1822	0.0404	00:26/11	Yes		
Mean:	5.887	5.887	0.0404						
SD:	0.047	0.047	0.0003						
RSD:	0.791	0.791	0.79						
=====	===========		:=======		=======;	/		========	:=========
_	ce No.: 252				Autos	ampler Locat	ion: 55	0.06.30	
_	ID: K3C5RD					Collected: 1		0:26:32	
nalys	t:			NA	Da/ta!	Type: Origin	nal	1000	o
				10			JEP	refo	·
Replic	ate Data: K3	C5RD					•	•	e 12/2/08
Repl	SampleConc	StndConc	BlnkCorr	Peak /	Peak	Time	Peak	~~	17/7/09
#	ug/L	ug/L	Signal	Area /	Height		Stored		12/200
1	5.937	5.937	0.0408	0.18/87	0.0409	00:27:23	Yes		
2	5.865	5.865	0.0403	0.1/822	0.0404	00:27:53	Yes		
Mean:		5.901	0.0405						
SD:	0.051	0.051	0.0004						
kRSD:	0.870	0.870	0.87						
=====	:========	========		=======	=======	=========			=======================================
					Autos	ampler Locat Collected: 1	cion: 56	0:28:11	
-	ice No.: 253		/			Type: Origin			
Sample	D: K3DCR								
Sample	D: K3DCR		/						
Sample Analys Replic	e ID: K3DCR st: cate Data: K3		ni-ks	Doc!-		Time	Destr		
Sample Analys Replic	e ID: K3DCR st: cate Data: K3	StndConc	BlnkCorr	Peak	Peak	Time	Peak Stored		
Sample Analys Replic Repl	e ID: K3DCR st: cate Data: K3 SampleConc ug/L	StndConc ug/L	Signal	Area	Height		Stored		
Sample Analys Replic Repl #	e ID: K3DCR st: cate Data: K3 SampleConc ug/L -0.014	StndConc ug/L -0.014	<b>Signal</b> -0.0001	<b>Area</b> -0.0009	Height	00:29:02	<b>Stored</b> Yes		·
Sample Analys Replic Repl # 1	e ID: K3DCR st: cate Data: K3 SampleConc ug/L -0.014 -0.013	StndConc ug/L -0.014 -0.013	<b>Signal</b> -0.0001 -0.0001	<b>Area</b> -0.0009	Height		Stored		
Replicate Handle Mean:	e ID: K3DCR st: cate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014	StndConc ug/L -0.014 -0.013 -0.014	<b>Signal</b> -0.0001 -0.0001 -0.0001	<b>Area</b> -0.0009	Height	00:29:02	<b>Stored</b> Yes		
Sample Analys Replic Repl # 1 2 Mean: SD:	e ID: K3DCR st: cate Data: K3 SampleConc ug/L -0.014 -0.013	StndConc ug/L -0.014 -0.013	<b>Signal</b> -0.0001 -0.0001	<b>Area</b> -0.0009	Height	00:29:02	<b>Stored</b> Yes		·
Sample Analys Replic Repl # 1 2 Mean: SD: %RSD:	E ID: K3DCR St: Cate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014 0.001 7.058	StndConc ug/L -0.014 -0.013 -0.014 0.001 7.058	Signal -0.0001 -0.0001 -0.0001 0.0000 5.61	<b>Area</b> -0.0009 -0.0004	<b>Height</b> 0.0001 0.0001	00:29:02 00:29:33	<b>Stored</b> Yes Yes		
Sample Analys Replic Repl # 1 2 Mean: SD: SRES SEQUEN	Eate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014 0.001 7.058	StndConc ug/L -0.014 -0.013 -0.014 0.001 7.058	<b>Signal</b> -0.0001 -0.0001 -0.0001 0.0000	<b>Area</b> -0.0009 -0.0004	Height 0.0001 0.0001	00:29:02 00:29:33	Stored Yes Yes Yes	========	=======================================
Sample Analys Replic Repl # 1 2 Mean: SD: %RSD:	E ID: K3DCR St: Cate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014 0.001 7.058	StndConc ug/L -0.014 -0.013 -0.014 0.001 7.058	Signal -0.0001 -0.0001 -0.0001 0.0000 5.61	<b>Area</b> -0.0009 -0.0004	Height 0.0001 0.0001	00:29:02 00:29:33 ===================================	Yes Yes Yes Yes 1200: 6	========	
Replicate Analys  Replicate An	Eate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014 0.001 7.058	StndConc ug/L -0.014 -0.013 -0.014 0.001 7.058	Signal -0.0001 -0.0001 -0.0001 0.0000 5.61	<b>Area</b> -0.0009 -0.0004	Height 0.0001 0.0001	00:29:02 00:29:33	Yes Yes Yes Yes 1200: 6	========	
Replicate Analys Replicate Analys Replicate Analys Replicate Analys	e ID: K3DCR st:  Cate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014 0.001 7.058	StndConc ug/L -0.014 -0.013 -0.014 0.001 7.058	Signal -0.0001 -0.0001 -0.0001 0.0000 5.61	<b>Area</b> -0.0009 -0.0004	Height 0.0001 0.0001	00:29:02 00:29:33 ===================================	Yes Yes Yes Yes 1200: 6	========	
Replicate Analys Replicate Analys Replicate Analys Replicate Analys Replicate Analys	e ID: K3DCR st:  cate Data: K3     SampleConc     ug/L     -0.014     -0.013     -0.014     0.001     7.058  cate No.: 254 e ID: CCV st:  cate Data: CC	StndConc ug/L -0.014 -0.013 -0.014 0.001 7.058	Signal -0.0001 -0.0001 -0.0001 0.0000 5.61	Area -0.0009 -0.0004	Height 0.0001 0.0001	00:29:02 00:29:33	Stored Yes Yes tion: 6 12/2/2008	========	
Sample Analys Replic Repl # 1 2 Mean: SD: *RSD:  Sequen Sample Analys Replic Repl	e ID: K3DCR st: cate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014 0.001 7.058  cate No.: 254 e ID: CCV st: cate Data: CC SampleConc	StndConc ug/L -0.014 -0.013 -0.914 0.001 7.058	Signal -0.0001 -0.0001 -0.0001 0.0000 5.61	Area -0.0009 -0.0004	Height 0.0001 0.0001	00:29:02 00:29:33 ===================================	Yes Yes Yes Yes 1200: 6	======== 0:29:51	
Sample Analys Replic Repl # 1 2 Mean: SD: RSD: Sequen Sample Analys Replic Repl #	e ID: K3DCR st:  cate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014 0.001 7.058  cate No.: 254 e ID: CCV st:  cate Data: CC SampleConc ug/L	StndConc ug/L -0.014 -0.013 -0.014 0.001 7.058	Signal -0.0001 -0.0001 -0.0001 0.0000 5.61 	Area -0.0009 -0.0004	Height 0.0001 0.0001  Autos Date Data  Peak Height	00:29:02 00:29:33	Stored Yes Yes Yes 12/2/2008 12/2/2008	======== 0:29:51	
Sample Analys Replic Repl # 1 2 Mean: SD: %RSD: ===== Sample Analys Replic Repl # 1	e ID: K3DCR st: cate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014 0.001 7.058 cate No.: 254 e ID: CCV st: cate Data: CC SampleConc ug/L 5.636	StndConc ug/L -0.014 -0.013 -0.014 0.001 7.058 	Signal -0.0001 -0.0001 -0.0001 0.0000 5.61 	Area -0.0009 -0.0004	Height 0.0001 0.0001  Autos Date Data Peak Height 0.0389	00:29:02 00:29:33	Stored Yes Yes Yes 12/2/2008 nal Peak Stored	======== 0:29:51	
Sample Analys Replic Repl # 1 2 Mean: SD: %RSD: ===== Sample Analys Replic Repl # 1 2	e ID: K3DCR st: cate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014 0.001 7.058  cate No.: 254 c ID: CCV st: cate Data: CC SampleConc ug/L 5.636 5.729	StndConc ug/L -0.014 -0.013 -0.014 0.001 7.058 	Signal -0.0001 -0.0001 -0.0001 0.0000 5.61 	Area -0.0009 -0.0004	Height 0.0001 0.0001  Autos Date Data  Peak Height	00:29:02 00:29:33  ==================================	Yes Yes Yes  Yes  Yes  Yes  Yes  Yes  Y	======== 0:29:51	
Sample Analys Replic Repl # 1 2 Mean: SD: RSD: Sequen Sample Analys Replic Repl # 1	e ID: K3DCR st: cate Data: K3 SampleConc ug/L -0.014 -0.013 -0.014 0.001 7.058 cate No.: 254 e ID: CCV st: cate Data: CC SampleConc ug/L 5.636	StndConc ug/L -0.014 -0.013 -0.014 0.001 7.058 	Signal -0.0001 -0.0001 -0.0001 0.0000 5.61  ===================================	Area -0.0009 -0.0004	Height 0.0001 0.0001  Autos Date Data Peak Height 0.0389	00:29:02 00:29:33  ==================================	Yes Yes Yes  Yes  Yes  Yes  Yes  Yes  Y	======== 0:29:51	

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All analyte(s) passed QC.

Sequence No.: 255 Autosampler Location: 1 Date Collected: 12/2/2008 0:31:38 Sample ID: CCB Data Type: Original Analyst: Replicate Data: CCB Peak Repl SampleConc StndConc BlnkCorr Peak Peak Time Stored # Signal Height ug/L ug/L Area -0.0000 0.0001 0.0002 00:32:29 Yes 1 0.003 0.003 2 -0.015 -0.015 -0.0001 -0.0013 0.0000 00:32:59 Ve: Mean: -0.006 -0.006 -0.0001 0.013 0.013 0.0001 SD: %RSD: 214.9 214.9 135.57 QC value within limits for Hg 253.7 Recovery = Not calculate All analyte(s) passed QC. Autosampler Location: 57 Sequence No.: 256 Sample ID: K3HF8 Date Collected: 12/2/2008 0:33:19 Analyst: Data Type: Original 12/2/08 Replicate Data: K3HF8 Peak Time SampleConc StndConc BlnkCorr Repl Stored # Signal Height ug/L ug/L Area -0.018 -0.018 -0.0001 -0.0015 0.0000 00:34:09 Yes 1 -0.002 -0.0000 0004 0.0001 00:34:40 Yes 2 -0.002 -0.0001 -0.010 -0.010Mean: 0.011 0.011 0.0001 SD: %RSD: 116.4 116.4 84.98 \_\_\_\_\_\_ Autosampler Location: 58 Sequence No.: 257 Date Collected: 12/2/2008 0:34:59 Sample ID: K3HPW Analyst: Data Type: Original Replicate Data: K3HPW Peak BlnkCorr Repl SampleConc StndConc Peak Peak Time ug/L Stored # ug/L Signal Height Area 0.004 00:35:50 Yes 0.004 0.0000 0.0018 0.0002 1 2 0.016 0.016 0.0001 0.0004 0.0003 00:36:21 0.010 0.01/0 0.0000 Mean· 0.008 0.008 0.0001 SD: %RSD: 81.83 .83 125.48 \_\_\_\_\_\_ Autosampler Location: 59 Sequence No.: 258 Sample ID: K3HP2 Date Collected: 12/2/2008 0:36:40 Data Type: Original Analyst: Replicate Data: K3HP2 Time Peak SampleConc StndConc BlnkCorr Peak Peak Repl Stored Height # ug/L ug/L Signal Area 00:37:32 Yes 0.0006 0.0002 1 0.012 0.012 0.0001 0.0017 0.0003 00:38:03 Yes 0/015 0.015 0.0001 2 .013 0.013 0.0001 Mean: 0.002 0.0000 SD: **/**0.002 %RSD: 14.65 14.65 20.07 Autosampler Location: 60 Sequence No.: 259 Date Collected: 12/2/2008 0:38:22 Sample ID: K3E1M Data Type: Original Analyst: Replicate Data: K3E1M BlnkCorr Peak Time Peak Repl SampleConc StndConc Peak Stored ug/L Signal Area Height # ug/L 0.0022 0.0005 00:39:14 Yes 1 0.052 0.052 0.0003

354

**1**.257 1.257 1

Signal Area Height y/g/L ug/L 0.0086 0.0088 0.0411 0.0088 1.254 1.254 2 1.255 1.255 0.0086 Mean: 0.002 0.0000 0.002 SD: 0.171 0.17 %RSD: 0.171

Sequence No.: 264

Sample ID: CCV

Autosampler Location: 6 Date Collected: 12/2/2008 0:47:07

00:46:16

00:46:47

Stored

Yes

	t:				Data T	ype: Origina	1		
-	ate Data: CC				_ ,		Page le		
Repl	SampleConc	StndConc		Peak -	Peak	Time	Peak Stored		
#	ug/L	ug/L	Signal	Area	Height		Yes	1	
1	5.876	5.876	0.0403	0.1801		00:48:01		}	
2	5.841	5.841	0.0401	0.1787	0.0403	00:48:31	Yes	/	
Mean:	5.859	5.859	0.0402						
SD:	0.025	0.025	0.0002						
≹RSD:	0.420	0.420	0.42	5		<b>5</b> 0			
	value within		r Hg 253.7	Recover	y = 117.1	178			
All an	alyte(s) pas	sed QC.							
Sequen	eeeeeeeeeeeeeeeeeeeeeeeeeeeeee	=,=========	=======================================		Autosa	ampler Locati	on: 1	======================================	======
Sample Analys	ID: CCB					Collected: 12 Type: Origina	1/2/2008 0:4/8:53 1		
							<i></i>		
-	ate Data: CC		-1.10	<b>5</b> 1-	<b>D</b> 1	m:	Peak		
Repl	SampleConc			Peak	Peak	Time	Stored		
#	ug/L	ug/L	Signal	Area	Height	00 40-45	Yes		
1	-0.014	-0.014	-0.0001	-0.0007		00:49:45	res Yes		
2	0.035	0.035	0.0002	0.0034	0.0004	00:50:15	res		
	0.011	0.011	0.0000						
SD:	0.035	0.035	0.0002						
	324.4	324.4	487.19						
QC	value within	limits fo	or Hg 253.7	Recover	y = Not			_	
All ar	ialyte(s) pas	sed QC.		۸۱۵	- /	17977	epare	C	12/2/08
=====	=========	========	=========		L==== <i>f</i> =:			=======	======
Sequer	nce No.: 266			, -	Ayrtos	ampler Locati	on: 65		
_	■ ID: K3JT3						2/2/2008 0:50:35		
					/ Data I		. 1		
Analys	st:				/ Data :	Type: Origina	уT		
Analys	st: 			/-	Data :	rype: Origina		<b>_</b>	
Replic	cate Data: K3		RinkCorr	Peak	<i></i>		Peak	<b></b> -	
Replic	cate Data: K3 SampleConc	StndConc		Peak	Peak	Time			<del></del>
Replic Repl	cate Data: K3 SampleConc ug/L	StndConc ug/L	Signal	Area	Peak Height	Time	Peak	± <b>=</b> +	
Replic	cate Data: K3 SampleConc ug/L 39.35	StndConc ug/L 39.35	<b>Signal</b> 0.2703	1.2845	Peak Height 0.2704	Time 00:51:28	Peak Stored Yes	<b></b>	
Replice Repl # 1 Sar	cate Data: K3 SampleConc ug/L 39.35 mple concentr	StndConc ug/L 39.35 ration is g	Signal 0.2703 greater than	Mrea 1.2845 that of	Peak Height 0.2704 the high	Time  00:51:28 hest standard	Peak Stored Yes		
Replic Repl # 1 Sar 2	Cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02	StndConc ug/L 39.35 ration is 9	Signal 0.2703 greater than 0.2680	1.2845 that of 1.2879	Peak Height 0.2704 the high	Time 00:51:28 hest standard 00:51:58	Peak Stored Yes d. Yes		
Replic Repl # 1 Sar 2	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr	StndConc ug/L 39.35 ration is 9 39.02 ration is 9	Signal 0.2703 greater than 0.2680 greater than	1.2845 that of 1.2879	Peak Height 0.2704 the high	Time 00:51:28 hest standard 00:51:58	Peak Stored Yes d. Yes		
Replice Repl # 1 Sar 2 Sar Mean:	SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19	StndConc ug/L 39.35 ration is 9 39.02 ration is 9 39.19	Signal 0.2703 greater than 0.2680 greater than 0.2691	1.2845 that of 1.2879	Peak Height 0.2704 the high	Time 00:51:28 hest standard 00:51:58	Peak Stored Yes d. Yes		
Replice Repl # 1 Sar 2 Sar Mean: SD:	SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235	StndConc ug/L 39.35 ration is 9 39.02 ration is 9 39.19 0.235	Signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016	1.2845 that of 1.2879	Peak Height 0.2704 the high	Time 00:51:28 hest standard 00:51:58	Peak Stored Yes d. Yes		
Replice Repl # 1 Sar 2 Sar Mean: SD: %RSD:	Sate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599	StndConc ug/L 39.35 sation is 9 39.02 sation is 9 39.19 0.235 0.599	signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60	1.2845 that of 1.2879 that of	Peak Height 0.2704 the high 0.2682 the high	Time 00:51:28 hest standard 00:51:58 hest standard	Peak Stored Yes d. Yes		
Replice Repl # 1 Sar 2 Sar Mean: SD: %RSD:	SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235	### StndConc	signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than	1.2845 that of 1.2879 that of	Peak Height 0.2704 the high 0.2682 the high	Time  00:51:28 hest standard 00:51:58 hest standard	Peak Stored Yes  . Yes  .		
Replication Replication Sar Sar Mean: SD: SRSD: Sar Sequential	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr	### StndConc	signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than	1.2845 that of 1.2879 that of	Peak Height 0.2704 the high 0.2682 the high	Time  00:51:28 hest standard hest standard hest standard	Peak Stored Yes  d. Yes  d.		
Replication Sar Sar Mean: SD: SRSD: Sar Sequential	Sate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr	### StndConc	signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than	1.2845 that of 1.2879 that of	Peak Height 0.2704 the high 0.2682 the high	Time  00:51:28 hest standard hest standard hest standard hest standard	Peak Stored Yes  . Yes		
Replication Sar Sar Mean: SD: Sar	Sate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr	### StndConc	signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than	1.2845 that of 1.2879 that of	Peak Height 0.2704 the high 0.2682 the high	Time  00:51:28 hest standard hest standard hest standard	Peak Stored Yes  . Yes		
Replication Replic	Sate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr	### StndConc	signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than	1.2845 that of 1.2879 that of	Peak Height 0.2704 the high 0.2682 the high	Time  00:51:28 hest standard hest standard hest standard hest standard	Peak Stored Yes  . Yes		
Replic Repl # 1 Sar 2 Sar Mean: SD: %RSD: Sar Sar Sequel Sample Analy:	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr	StndConc ug/L 39.35 ration is 9 39.02 ration is 9 39.19 0.235 0.599 ration is 9	signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than	1.2845 that of 1.2879 that of	Peak Height 0.2704 the high 0.2682 the high	Time  00:51:28 hest standard hest standard hest standard hest standard	Peak Stored Yes  . Yes		
Replic Repl # 1 Sar 2 Sar Mean: SD: SAR SD: Sar  ====: Seque: Sampla Analy: Replic	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr ====================================	StndConc ug/L 39.35 ration is 9 39.02 ration is 9 0.235 0.599 ration is 9	Signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than	1.2845 that of 1.2879 that of	Peak Height 0.2704 the high 0.2682 the high	Time  00:51:28 hest standard hest standard hest standard  Collected: 12 Type: Origina	Peak Stored Yes d. Yes d.  ion: 66 2/2/2008 0:52:29		
Replication Sar 2 Sar Mean: SD: %RSD: Sar Sar Sar Sequel Sampla Analy: Replication Replication Sar	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr	stndConc ug/L 39.35 ration is 9 39.02 ration is 9 0.235 0.599 ration is 9 ration is 9	Signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than	1.2845 that of 1.2879 that of that of	Peak Height 0.2704 the high 0.2682 the high the high	Time  00:51:28 hest standard hest standard hest standard hest standard	Peak Stored Yes d. Yes d.  1.  1.  1.  1.  1.  1.  1.  1.  1.		
Replic Repl  # 1 Sar 2 Sar Mean: SD: %RSD: Sar  Sequel Samplo Analy: Replic Repl #	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr  cate No.: 267 e ID: K3JT4 st:  cate Data: K3 SampleConc ug/L	stndConc ug/L 39.35 ration is 9 39.02 ration is 9 0.235 0.599 ration is 9 ration is 9	Signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than	1.2845 that of 1.2879 that of that of	Peak Height 0.2704 the high 0.2682 the high the high	Time  00:51:28 hest standard 00:51:58 hest standard hest standard  Time  Time	Peak Stored Yes d. Yes d.  1.  2.  2.  3.  4.  4.  4.  4.  5.  6.  6.  6.  6.  6.  6.  7.  7.  8.  9.  9.  9.  9.  9.  9.  9.  9.  9		======
Replication Sar Sar Mean: SD: %RSD: Sar Mean: SSD: %RSD: Samplo Analy: Replication # 1	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr  mce No.: 267 e ID: K3JT4 st:  cate Data: K3 SampleConc ug/L 1.206	stndConc ug/L 39.35 ration is 9 39.02 ration is 9 0.235 0.599 ration is 9 ration is 9 ration is 9 ration is 9 ration is 9 ration is 9 20074 stndConc ug/L 1.206	Signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than  BlnkCorr Signal 0.0083	Peak Area 0.0447	Peak Height 0.2704 the high 0.2682 the high the high	Time  00:51:28 hest standard 00:51:58 hest standard hest standard Type: Original	Peak Stored Yes  Yes  d.  Yes  d.  Peak Stored Yes  Peak Stored Yes		======
Replication Sar Sar Mean: Sar Sar Sar Sar Sar Samplication Samplication Replication Replication Replication Sar	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr  cate No.: 267 e ID: K3JT4 st:  cate Data: K3 SampleConc ug/L	### StndConc  ### ug/L  ### 39.35  ### ration is 9  ### 39.19  ### 0.235  ### 0.599  ### ration is 9  ### stndConc  ### ug/L  ### 1.206  ### 1.206  ### 1.184	signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than  BlnkCorr signal 0.0083 0.0081	1.2845 that of 1.2879 that of that of	Peak Height 0.2704 the high 0.2682 the high the high	Time  00:51:28 hest standard 00:51:58 hest standard hest standard  Time  Time	Peak Stored Yes d. Yes d.  1.  2.  2.  3.  4.  4.  4.  4.  5.  6.  6.  6.  6.  6.  6.  7.  7.  8.  9.  9.  9.  9.  9.  9.  9.  9.  9		======
Replication Sar Sar Mean: SD: %RSD: Sar Mean: SSD: %RSD: Samplo Analy: Replication # 1	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr  ===================================	stndConc ug/L 39.35 ration is 9 39.02 ration is 9 0.235 0.599 ration is 9 ration is 9 ration is 9 ration is 9 ration is 9 ration is 9 20074 stndConc ug/L 1.206	## Signal	Peak Area 0.0447	Peak Height 0.2704 the high 0.2682 the high the high	Time  00:51:28 hest standard 00:51:58 hest standard hest standard Type: Original	Peak Stored Yes  Yes  d.  Yes  d.  Peak Stored Yes  Peak Stored Yes		
Replication Sar Sar Mean: So: Respl: Sar Mean: So: Respl: Sar Sar Mean: Sar Mean: Replication Replication Head Sar Sar Near Sar N	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr  ===================================	### StndConc  ### ug/L  ### 39.35  ### ration is 9  ### 39.19  ### 0.235  ### 0.599  ### ration is 9  ### stndConc  ### ug/L  ### 1.206  ### 1.206  ### 1.184	signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than  BlnkCorr signal 0.0083 0.0081	Peak Area 0.0447	Peak Height 0.2704 the high 0.2682 the high the high	Time  00:51:28 hest standard 00:51:58 hest standard hest standard Type: Original	Peak Stored Yes  Yes  d.  Yes  d.  Peak Stored Yes  Peak Stored Yes		=====
Replice Replice Sar Mean: SD: %RSD: %RSD: Sar Sequel Sample Analy: Replice Rep	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr  ===================================	### StndConc  ### ug/L  ### 39.35  ### ation is 9  ### 39.19  ### 0.235  ### 0.599  ### ration is 9  ### stndConc  ### ug/L  ### 1.206  ### 1.195	## Signal	Peak Area 0.0447	Peak Height 0.2704 the high 0.2682 the high the high	Time  00:51:28 hest standard 00:51:58 hest standard hest standard Type: Original	Peak Stored Yes  Yes  d.  Yes  d.  Peak Stored Yes  Peak Stored Yes		======
Replication Replic	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr  cate No.: 267 e ID: K3JT4 st:  cate Data: K3 SampleConc ug/L 1.206 1.184 1.195 0.716	### StndConc  ### ug/L  ### 39.35  ### ation is 9  ### 39.19  ### 0.235  ### 0.599  ### ration is 9  ### stndConc  ### ug/L  ### 1.206  ### 1.195  ### 0.016	## Signal   0.2703	Peak Area 0.0447	Peak Height 0.2704 the high 0.2682 the high the high the high	Time  00:51:28 hest standard 00:51:58 hest standard hest standard Type: Original Time  00:53:22 00:53:53	Peak Stored Yes  d. Yes  d.  Peak Stored Yes  peak Stored Yes Yes Yes		
Replication Sar Sar Mean: SD: Sar Sequents Sample Analys Replication # 1 2 Mean: SD: %RSD: # 1 2 Mean: SD: %RSD:	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr  ===================================	### StndConc	Signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than  BlnkCorr Signal 0.0083 0.0081 0.0082 0.0001 1.33	Peak Area 0.0447 0.0422	Peak Height 0.2704 the high 0.2682 the high the high the high The high Peak Height 0.0084 0.0083	Time  00:51:28 hest standard 00:51:58 hest standard hest standard  Time  00:53:22 00:53:53	Peak Stored Yes  1. Yes  1.  Yes  2.  Peak Stored Yes Yes Yes		<b></b>
Replication Replic	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr  cate No.: 267 e ID: K3JT4 st:  cate Data: K3 SampleConc ug/L 1.206 1.184 1.195 0.016 1.330	### StndConc	Signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than  BlnkCorr Signal 0.0083 0.0081 0.0082 0.0001 1.33	Peak Area 0.0447 0.0422	Peak Height 0.2704 the high 0.2682 the high the high the high Peak Height 0.0084 0.0083	Time  00:51:28 hest standard 00:51:58 hest standard hest standard Time  00:53:22 00:53:53	Peak Stored Yes  1. Yes  1.  Peak Stored Yes  2/2/2008 0:52:29  21  Peak Stored Yes Yes Yes		<b></b>
Replication Replic	cate Data: K3 SampleConc ug/L 39.35 mple concentr 39.02 mple concentr 39.19 0.235 0.599 mple concentr  ===================================	### StndConc	Signal 0.2703 greater than 0.2680 greater than 0.2691 0.0016 0.60 greater than  BlnkCorr Signal 0.0083 0.0081 0.0082 0.0001 1.33	Peak Area 0.0447 0.0422	Peak Height 0.2704 the high 0.2682 the high The	Time  00:51:28 hest standard 00:51:58 hest standard hest standard Time  00:53:22 00:53:53	Peak Stored Yes  1. Yes  2. Yes  2. Yes  3. Peak Stored Yes Yes Yes Yes Yes  1. Peak Stored Yes Yes Yes		<b></b>

Replicate Data: K3JT5

_	i: Hg		·		Page 60		D	ate: 12/2	/2008 1:03:03
Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak		
#	ug/L	ug/L	Signal	Area	Height	110	Stored		
ï 1	0.523	0.523	0.0036	0.0224	0.0037	00:55:07	Yes		
2	0.503	0.503	0.0034	0.0206	0.0036	00:55:38	Yes		)
Mean:	0.513	0.513	0.0035						/
D:	0.014	0.014	0.0003						
kRSD:	2.783	2.783	2.80						
ilicae:	4.103	4./03	۵.00						
=====	========	========			=======	=======================================	======	======/	=========
-	nce No.: 269				Autosa	ampler Location Collected: 12,	on: 68	0.58.00	
_	e ID: K3JT6					Type: Original		0.30.00	
\nalys	SC:				Data .	Type: Origina.			
							<i></i>		
	cate Data: K3		<b>7.10</b>	<b>n</b> 1-	D = = 1-	mi-no /	Peak		
≀ep1	SampleConc	StndConc		Peak	Peak	Time			
#	ug/L	ug/L	Signal	Area	Height	00.55	Stored		
1	-0.016	-0.016	-0.0001	-0.0009		00:56:53	Yes		
2	0.013	0.013	0.0001	0.0018	0.0002	00:57:24	Yes		
Mean:	-0.001	-0.001	-0.0000						
SD:	0.021	0.021	0.0001						
&RSD:		>999.9%	426.14		/	•			
	======================================	=========	========		Auton	ampler Locati			_======================================
-	nce No.: 270 e ID: K3JT7				Date	Collected: 12	/2/2008	0:57:46	
Sampıe Analy:			Λ	1A /	Data '	Type: Origina	1		
илату:	3C I		/\	M /	Data	- ortarua	٠. ا د.	2108	
						$\mathcal{O}$	121	400	
Repli	cate Data: K3	ВЈТ7	[7]	Ricia	, —				
Rep1	SampleConc	StndConc	BlnkCorr	eak	Peak	Time	Peak		
#	ug/L	ug/L	Signal	Area	Height		Stored		
1	41.21	41.21	0.2830	1.2055	0.2832	00:58:40	Yes		
						hest standard	•		
2	36.81	36.81	0.2528	0.9816	0.2529	00:59:10	Yes		
						hest standard			
				chac OI	cire iiig	ricec scarratu	•		
Mean:		39.01	0.26/19						
SD:	3.112	3.112	0.9214						
%RSD:		7.978	7/98						
Sar	male concentr	ration is d	xr∉ater than	that of	the hig	hest standard	•		
	mpre correction	acton 15 (							
=====:	==========	======================================			======	=========	======	=======	:==========
===== Seque	nce No.: 271	=======================================		======		ampler Locati		0.59:42	=======================================
Seque	nce No.: 271 e ID: K3JT9				Date	ampler Locati Collected: 12 Type: Origina	/2/2008	0:59:42	
Seque	nce No.: 271 e ID: K3JT9				Date	Collected: 12	/2/2008	0:59:42	
Sequer Samplo	nce No.: 271 e ID: K3JT9				Date	Collected: 12	/2/2008	0:59:42	
Seque: Samplo Analy Repli	nce No.: 271 e ID: K3JT9 st:	зуту	BlnkCorr	Peak	Date Data  Peak	Collected: 12	/2/2008 1 	0:59: <b>4</b> 2	
Seque: Samplo Analy Repli	nce No.: 271 e ID: K3JT9 st: cate Data: K	зуту		Peak	Date Data Peak Height	Collected: 12 Type: Origina Time	/2/2008 1  Peak Stored	0:59:42	
Sequer Samplo Analy Replic Repl	nce No.: 271 e ID: K3JT9 st:  cate Data: K3 SampleConc ug/L 28.71	SJT9 StndConc ug/L 28.71	BlnkCorr Signal 0.1972	Peak Area 1.0989	Date Data  Peak Height 0.1974	Collected: 12 Type: Origina Time 01:00:37	/2/2008 1  Peak Stored Yes	0:59:42	
Sequer Samplo Analy Replic Repl	nce No.: 271 e ID: K3JT9 st:  cate Data: K3 SampleConc ug/L 28.71	SJT9 StndConc ug/L 28.71	BlnkCorr Signal 0.1972	Peak Area 1.0989	Date Data  Peak Height 0.1974	Collected: 12 Type: Origina Time 01:00:37	/2/2008 1  Peak Stored Yes	0:59:42	
Sequer Sample Sample Analy Repli Repl #	nce No.: 271 e ID: K3JT9 st: cate Data: K3 SampleConc ug/L 28.71 mple concent	SJT9 StndConc ug/L 28.71 ration is	BlnkCorr Signal 0.1972 greater than	Peak Area 1.0989 that of	Peak Height 0.1974 the hig	Collected: 12 Type: Origina Time	/2/2008 1  Peak Stored Yes	0:59:42	
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Seques Samplo Analy Repli Repl # 1 Sam 2 Sam Mean:	nce No.: 271 e ID: K3JT9 st:  cate Data: K3 SampleConc ug/L 28.71 mple concent; 29.03 mple concent; 28.87	SJT9 StndConc ug/L 28.71 ration is c 29.03 ration is c 28.87	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983	Peak Area 1.0989 that of	Peak Height 0.1974 the hig 0.1995	Collected: 12 Type: Origina Time 01:00:37 hest standard 01:01:08	/2/2008 1 Peak Stored Yes Yes	0:59:42	
Seques Samplo Analy  Repli Repl # 1 Sam 2 Sam Mean: SD:	cate Data: K3 SampleConc ug/L 28.71 mple concents 29.03 mple concents 28.87 0.223	SJT9 StndConc ug/L 28.71 ration is 29.03 ration is 28.87 0.223	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015	Peak Area 1.0989 that of	Peak Height 0.1974 the hig 0.1995	Collected: 12 Type: Origina Time 01:00:37 hest standard 01:01:08	/2/2008 1 Peak Stored Yes Yes	0:59:42	
Seques Sample Analy Repli Repl # 1 Sam 2 Sam Mean: SD: %RSD:	cate Data: K: SampleConc ug/L 28.71 mple concent: 29.03 mple concent: 28.87 0.223 0.774	3JT9 StndConc ug/L 28.71 ration is (29.03) ration is (28.87) 0.223 0.774	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig	Time  01:00:37 hest standard 01:01:08 hest standard	/2/2008 1 Peak Stored Yes Yes	0:59:42	
Seques Sample Analy  Repli Repl # 1 Sam 2 Sam Exam Sam Sam Sam Sam Sam Sam Sam Sam Sam S	cate Data: K: SampleConc ug/L 28.71 mple concent: 29.03 mple concent: 28.87 0.223 0.774	3JT9 StndConc ug/L 28.71 ration is (29.03) ration is (28.87) 0.223 0.774	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig	Collected: 12 Type: Origina Time 01:00:37 hest standard 01:01:08	/2/2008 1 Peak Stored Yes Yes	0:59:42	
Seques Sample Analy  Repli Repl # 1 Sam 2 Sam Mean: SD: %RSD: Sam	cate Data: K3 SampleConc ug/L 28.71 mple concent: 29.03 mple concent: 28.87 0.223 0.774 mple concent:	stndConc ug/L 28.71 ration is 29.03 ration is 28.87 0.223 0.774 ration is 6	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77 greater than	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig	Time  01:00:37 hest standard 01:01:08 hest standard	/2/2008  Peak Stored Yes Yes		
Seques Sample Analy  Repli Repl # 1 Sam 2 Sam Ean: SD: %RSD: Sam Ean: Sam E	cate Data: K: SampleConc ug/L 28.71 mple concent: 29.03 mple concent: 28.87 0.223 0.774 umple concent:	stndConc ug/L 28.71 ration is 29.03 ration is 28.87 0.223 0.774 ration is 6	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77 greater than	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig	Time  01:00:37 hest standard 01:01:08 hest standard hest standard	/2/2008  Peak Stored Yes Yes  Tes Tes Tes Tes Tes Tes Tes Tes Tes		
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Seques Sample Sample Analy Repli Repl # 1 Sam 2 Sam Ean: SD: %RSD: Sam Esseque Sampl	cate Data: K: SampleConc ug/L 28.71 mple concent: 29.03 mple concent: 28.87 0.223 0.774 mple concent: 28.87 0.223 0.774 mple concent: 28.87	stndConc ug/L 28.71 ration is 29.03 ration is 28.87 0.223 0.774 ration is 6	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77 greater than	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig	Time  01:00:37 hest standard 01:01:08 hest standard hest standard	/2/2008  Peak Stored Yes Yes  Tes  1  1  1  1  1  1  1  1  1  1  1  1  1		
Seques Sample Analy Repli Repl # 1 Sam 2 Sam Mean: SD: SRSD: SRSD: Sam	cate Data: K: SampleConc ug/L 28.71 mple concent: 29.03 mple concent: 28.87 0.223 0.774 mple concent: 28.87 0.223 0.774 mple concent: 28.87	stndConc ug/L 28.71 ration is 29.03 ration is 28.87 0.223 0.774 ration is 6	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77 greater than	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig	Time  01:00:37 hest standard 01:01:08 hest standard hest standard collected: 12	/2/2008  Peak Stored Yes Yes  Tes  1  1  1  1  1  1  1  1  1  1  1  1  1		
Seque: Sampl: Analy: Repli Repl # 1 Sa: 2 Sa: Mean: SD: SRESD: Sa  Seque Sampl Analy	mce No.: 271 e ID: K3JT9 st:  cate Data: K3 SampleConc ug/L 28.71 mple concent 29.03 mple concent 28.87 0.223 0.774 mple concent: cate Data: K3 mple concent 28.87 0.223 0.774 mple concent: cate Data: K3 mple concent 28.87 0.223 0.774 mple concent: cate Discontinuation of the concent cate Data: K3 mple concent cate Discontinuation of the concent cate Data: K3 mple concent cate Data: Cate Data: K3 mple concent cate Data: Cate	stndConc ug/L 28.71 ration is 29.03 ration is 28.87 0.223 0.774 ration is 6	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77 greater than	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig	Time  01:00:37 hest standard 01:01:08 hest standard hest standard collected: 12	/2/2008  Peak Stored Yes Yes  Tes  1  1  1  1  1  1  1  1  1  1  1  1  1		
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Seques Sample Analy Repli Repli Sam	cate Data: Ki SampleConcug/L 28.71 mple concent: 29.03 mple concent: 28.87 0.223 0.774 mple concent: 28.87 0.223 concent: 28.87 concent: 28.8	stndConc ug/L 28.71 ration is 29.03 ration is 28.87 0.223 0.774 ration is 6	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77 greater than	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig the hig	Time  01:00:37 hest standard 01:01:08 hest standard hest standard Collected: 12 Type: Origina	/2/2008  Peak Stored Yes Yes  72/2008		
Sequents Sample Analy:  Repli # 1	cate Data: K3 SampleConc ug/L 28.71 mple concent: 29.03 mple concent: 28.87 0.223 0.774 mple concent: 28.87 0.223 concent: 28.87 concent: 28.	stndConc ug/L 28.71 ration is 29.03 ration is 28.87 0.223 0.774 ration is 6	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77 greater than	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig the hig  Autos Date Data  Peak Height 1.1266	Time  01:00:37 hest standard 01:01:08 hest standard hest standard  Time  01:01:08 hest standard  Time  01:01:08 hest standard	/2/2008  Peak Stored Yes  Yes  1		
Seques Sampla Analy Repli Repli Sam	cate Data: K3 SampleConc ug/L 28.71 mple concent: 29.03 mple concent: 28.87 0.223 0.774 mple concent: 28.87 0.223 concent: 28.87 concent: 29.03 mple concent: 29.	stndConc ug/L 28.71 ration is a 29.03 ration is a 28.87 0.223 0.774 ration is a stndConc ug/L 164.0	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77 greater than	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig the hig  Autos Date Data  Peak Height 1.1266	Time  01:00:37 hest standard 01:01:08 hest standard hest standard  Time  01:01:08 hest standard  Time  01:01:08 hest standard hest standard hest standard	/2/2008  Peak Stored Yes  Yes  1  Peak Stored Yes  Yes		
equesiamplication in the sequence of the seque	cate Data: K: SampleConc ug/L 28.71 mple concent: 29.03 mple concent: 28.87 0.223 0.774 mple concent: 28.87 0.223	stndConc ug/L 28.71 ration is 29.03 ration is 28.87 0.223 0.774 ration is 6	BlnkCorr Signal 0.1972 greater than 0.1993 greater than 0.1983 0.0015 0.77 greater than	Peak Area 1.0989 that of 1.1135 that of	Peak Height 0.1974 the hig 0.1995 the hig the hig  Autos Date Data  Peak Height 1.1266	Time  01:00:37 hest standard 01:01:08 hest standard hest standard  Time  01:01:08 hest standard  Time  01:01:08 hest standard	/2/2008  Peak Stored Yes  Yes  1		

iethod	: Hg				Page 61	·	I	Date: 12/2/2008 1:10
Sam	ple concent:	ration is g		that of	the high	est st <del>andar</del>	4	
ſean:	162.7	162.7	1.1174					
SD:	1.853	1.853	0.0127					
	nple concenti	1.139	1.14 reater than	that of	the high	est standar	d.	
Dan	pre concent	acton 15 9	LCGCCL CITCHI	chac or	ciic iiigi	.020		
				=======		mpler Locat	======= ion: 72	
_	ce No.: 273				Date C	collected: 1	2/2/2008	1:03:30
Analys						ype: Origin		
Replic Repl	ate Data: Ki SampleConc		PlakCorr	Peak	Peak	Time	Peak /	
#	ug/L	ug/L	Signal	Area	Height	TIME	Stored	
1	-0.042	-0.042	-0.0003		-	01:04:22	Xes	
2	0.009	0.009	0.0000	-0.0012		01:04:53	Yes	
	-0.017		-0.0001	0.0012	0.0002	01.01.33	/ 100	
		-0.017				/	/	
SD:	0.036	0.036	0.0002					
kRSD:	217.1	217.1	179.02					
			=======================================				=======	=======================================
-	ice No.: 274				Autosa	mpler Locat Collected: 1	ion: 6 2/2/2008	1:05:11
sampre Analys						Type: Origin		
				ALA	/	represo	e	-12/2/08
Replic	ate Data: C	CV		10-27		17,7	:	1 1000
Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak	
#	ug/L	ug/L	Signal	Area	Height		Stored	
1	5.477	5.477	0.0376	0.1759	Ø.0378	01:06:05	Yes	
2		5.420	0.0370	0.1726	0.0374	01:06:36	Yes	
	5.448	5.448	0.0374	0.1/20/	0.00/=	000.00		
SD:	0.041	0.041	0.0003					
	0.745	0.745	0.75					
	value withi nalyte(s) pa		or Hg 253.7	Recover	y = 108.9	<b>)</b> '/%		
	nce No.: 275				Autos	ampler Locat	ion: 1	
_	D: CCB				Date (	Collected: 1	2/2/2008	1:06:58
Analys					Data !	Type: Origin	al	
					-			
Replic	cate Data: C	СВ						
Repl	SampleConc		/	Peak	Peak	Time	Peak	
#	ug/L	ug/L /	Signal	Area	Height		Stored	
1	-0.005	-0.005/	-0.0001	0.0006	0.0001	01:07:49	Yes	
2	0.013	0.013/	0.0001	0.0017	0.0002	01:08:20	Yes	
Mean:	0.004	0.004	0.0000					
SD:	0.013	0.013	0.0001					
		341.2						
%RSD:			>999.9%	Dogoss	NT			
	value withi		or ng 253./	kecover	$\lambda = MOC$	Jaiculated		
All ar	nalyte(s) pa	ssted QC.						
	=======	<b>_</b>	=========	=======				=======================================
	nce No.: 276 e ID: K3L5G				Autos: Date	ampler Locat Collected: 1	.10n: 73	1:08:39
_	,					Type: Origin		
Analys	/				Data	-15c. Oragin		
Ben1i	cate Data: K							
Replic	SampleConc		BlnkCorr	Peak	Peak	Time	Peak	
#	(ug/L	ug/L	Signal	Area	Height	04 00 00	Stored	
1	0.029	0.029	0.0002	0.0023		01:09:30	Yes	
2	0.029	0.029	0.0002	0.0027	0.0003	01:10:01	Yes	
	0.029	0.029	0.0002					
Mean:								
		0.000	0.0000					
SD:	0.000	0.000	0.0000 0.91					
		0.000	0.0000					

TestAmerica

Sequence No.: 277 Sample ID: CCV Analyst:

Autosampler Location: 6

Date Collected: 12/2/2008 1:10:20

Data Type: Original

Replicate Data: CCV

Rep1	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.497	5.497	0.0377	0.1732	0.0379	01:11:14	Yes _
2	5.493	5.493	0.0377	0.1744	0.0379	01:11:45	Yes
Mean:	5.495	5.495	0.0377				

SD: 0.003 0.003 0.0000 %RSD: 0.054 0.054 0.05 QC value within limits for Hg 253.7 Recovery = 109.89%

All analyte(s) passed QC.

12/2/08

Sequence No.: 278

Sample ID: CCB Analyst:

Autosampler Location: 1

Date Collected: 12/2/2008 1:12:07

Data Type: Original

Replicate Data: CCB

Rep1	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.004	-0.004	-0.0001	-0.0002	0.0001	01:12:58	Yes
2	0.026	0.026	0.0002	0.0018	0.0003	01:13:29	Yes
Mean:	0.011	0.011	0.0001				

0.0001 291.72 0.022 SD: %RSD: 197 197.1

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed oc.



December 12, 2008

Vista Project I.D.: 31223

Mr. Joseph Doak Test America-Irvine, CA 17461 Derian Avenue Suite 100 Irvine, CA 92614

Dear Mr. Doak,

Enclosed are the results for the one aqueous sample received at Vista Analytical Laboratory on November 29, 2008 under your Project Name "IRK2828". This sample was extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

The following report consists of a Sample Inventory (Section I), Analytical Results (Section II) and the Appendix, which contains the chain-of-custody, a list of data qualifiers and abbreviations, Vista's current certifications, and copies of the raw data (if requested).

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com. Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha M. Maier Laboratory Director



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAC for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista Analytical Laboratory.



# Section I: Sample Inventory Report Date Received: 11/29/2008

<u>Vista Lab. ID</u> <u>Client Sample ID</u>

31223-001 IRK2828-01

# **SECTION II**

Project 31223 Page 3 of 217

Method Blank					EPA Method 1613
Matrix: Aqueous		QC Batch No.:	1751	Lab Sample: 0-MB001	
Sample Size: 1.00 L		Date Extracted:	9-Dec-08	Date Analyzed DB-5: 11-Dec-08	Date Analyzed DB-225: NA
Analyte Conc.	(ng/L)	DL a EMPC	PC <sup>b</sup> Qualifiers	Labeled Standard	%R LCL-UCL <sup>d</sup> Qualifiers
2,3,7,8-TCDD	ND	0.00000105		<u>IS</u> 13C-2,3,7,8-TCDD	81.6 25 - 164
1,2,3,7,8-PeCDD	ND	0.00000167		13C-1,2,3,7,8-PeCDD	72.0 25 - 181
1,2,3,4,7,8-HxCDD	ND	0.00000324		13C-1,2,3,4,7,8-HxCDD	73.1 32 - 141
1,2,3,6,7,8-HxCDD	ND	0.00000316		13C-1,2,3,6,7,8-HxCDD	80.4 28 - 130
1,2,3,7,8,9-HxCDD	ND	0.00000297		13C-1,2,3,4,6,7,8-HpCDD	77.1 23 - 140
1,2,3,4,6,7,8-HpCDD	ND	0.00000531		13C-OCDD	61.5 17 - 157
OCDD	ND	0.0000127		13C-2,3,7,8-TCDF	84.9 24 - 169
2,3,7,8-TCDF	ND	0.0000000808		13C-1,2,3,7,8-PeCDF	70.7 24 - 185
1,2,3,7,8-PeCDF	ND	0.00000202		13C-2,3,4,7,8-PeCDF	74.2 21 - 178
2,3,4,7,8-PeCDF	ND	0.00000222		13C-1,2,3,4,7,8-HxCDF	68.2 26 - 152
1,2,3,4,7,8-HxCDF	ND	0.00000133		13C-1,2,3,6,7,8-HxCDF	67.3 26 - 123
1,2,3,6,7,8-HxCDF	ND	0.00000143		13C-2,3,4,6,7,8-HxCDF	72.8 28 - 136
2,3,4,6,7,8-HxCDF	ND	0.00000160		13C-1,2,3,7,8,9-HxCDF	75.6 29 - 147
1,2,3,7,8,9-HxCDF	ND	0.00000216		13C-1,2,3,4,6,7,8-HpCDF	67.3 28 - 143
1,2,3,4,6,7,8-HpCDF	ND	0.00000199		13C-1,2,3,4,7,8,9-HpCDF	73.7 26 - 138
1,2,3,4,7,8,9-HpCDF	ND	0.00000240		13C-OCDF	60.7 17 - 157
OCDF	ND	0.00000460		<u>CRS</u> 37CI-2,3,7,8-TCDD	100 35 - 197
Totals				Footnotes	
Total TCDD	ND	0.00000105		a. Sample specific estimated detection limit.	
Total PeCDD	ND	0.00000167		b. Estimated maximum possible concentration.	
Total HxCDD	ND	0.00000313		c. Method detection limit.	
Total HpCDD	ND	0.	0.00000362	d. Lower control limit - upper control limit.	
Total TCDF	ND	0.000000808			
Total PeCDF	ND	0.00000212			
Total HxCDF	ND	0.00000161			
Total HpCDF	ND	0.00000217			
Analyst: MAS				Approved By: William J. Luksemburg	ıksemburg 12-Dec-2008 10:50

Anal

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Project 31223

OPR Results					EPA N	EPA Method 1613	3
Matrix: Aqueous Sample Size: 1.00 L		QC Batch No.: Date Extracted:	1751 9-Dec-08	Lab Sample: 0-OPR001 Date Analyzed DB-5: 11-Dec-08	Date Analyzed DB-225:		NA A
Analyte	Spike Conc.	Spike Conc. Conc. (ng/mL)	OPR Limits	Labeled Standard	%R L(	LCL-UCL Qualifier	nalifier
2,3,7,8-TCDD	10.0	9.24	6.7 - 15.8	<u>IS</u> 13C-2,3,7,8-TCDD	70.4	25 - 164	
1,2,3,7,8-PeCDD	50.0	47.8	35 - 71	13C-1,2,3,7,8-PeCDD	60.3	25 - 181	
1,2,3,4,7,8-HxCDD	50.0	47.7	35 - 82	13C-1,2,3,4,7,8-HxCDD	66.5	32 - 141	
1,2,3,6,7,8-HxCDD	50.0	48.5	38 - 67	13C-1,2,3,6,7,8-HxCDD	75.3	28 - 130	
1,2,3,7,8,9-HxCDD	50.0	47.8	32 - 81	13C-1,2,3,4,6,7,8-HpCDD	65.4	23 - 140	
1,2,3,4,6,7,8-HpCDD	50.0	46.5	35 - 70	13C-OCDD	44.5	17 - 157	
ОСДД	100	94.5	78 - 144	13C-2,3,7,8-TCDF	74.5	24 - 169	
2,3,7,8-TCDF	10.0	9.29	7.5 - 15.8	13C-1,2,3,7,8-PeCDF	57.2	24 - 185	
1,2,3,7,8-PeCDF	50.0	44.8	40 - 67	13C-2,3,4,7,8-PeCDF	61.8	21 - 178	
2,3,4,7,8-PeCDF	50.0	44.8	34 - 80	13C-1,2,3,4,7,8-HxCDF	62.2	26 - 152	
1,2,3,4,7,8-HxCDF	50.0	46.0	36 - 67	13C-1,2,3,6,7,8-HxCDF	63.7	26 - 123	
1,2,3,6,7,8-HxCDF	50.0	46.8	42 - 65	13C-2,3,4,6,7,8-HxCDF	65.7	28 - 136	
2,3,4,6,7,8-HxCDF	50.0	46.2	35 - 78	13C-1,2,3,7,8,9-HxCDF	6.99	29 - 147	
1,2,3,7,8,9-HxCDF	50.0	46.5	39 - 65	13C-1,2,3,4,6,7,8-HpCDF	59.7	28 - 143	
1,2,3,4,6,7,8-HpCDF	50.0	47.4	41 - 61	13C-1,2,3,4,7,8,9-HpCDF	55.5	26 - 138	
1,2,3,4,7,8,9-HpCDF	50.0	48.2	39 - 69	13C-OCDF	41.9	17 - 157	
OCDF	100	84.1	63 - 170	<u>CRS</u> 37Cl-2,3,7,8-TCDD	76.8	35 - 197	

Approved By: William J. Luksemburg 12-Dec-2008 10:50

Analyst: MAS

Sample ID: IRK	IRK2828-01							EPA M	EPA Method 1613
<u>Data</u>	,		Sample Data		Laboratory Data				
Name: Lest   Project   TRK	Lest America-Irvine, CA IRK 2828		Matrix:	Aqueous	Lab Sample:	31223-001	Date Received:	eived:	29-Nov-08
llected: llected:	26-Nov-08 1330		Sample Size:	T 666'0	QC Batch No.: Date Analyzed DB-5:	1751 11-Dec-08	Date Extracted: Date Analyzed I	Date Extracted: Date Analyzed DB-225:	9-Dec-08 NA
Analyte	Conc. (ug/L)	DL a	<b>EMPC</b> <sup>b</sup>	Qualifiers	Labeled Standard	dard	%R I	rcr-ncr <sub>q</sub>	Qualifiers
2,3,7,8-TCDD	ND	0.0000011	11		<u>IS</u> 13C-2,3,7,8-TCDD	CDD	81.5	25 - 164	
1,2,3,7,8-PeCDD	ND	0.0000021	7		13C-1,2,3,7,8-PeCDD	eCDD	71.9	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000381	31		13C-1,2,3,4,7,8-HxCDD	-HxCDD	73.0	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000339	6		13C-1,2,3,6,7,8-HxCDD	-HxCDD	79.4	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000333	33		13C-1,2,3,4,6,7,8-HpCDD	7,8-НрСDD	81.6	23 - 140	
1,2,3,4,6,7,8-HpCDD	ND	0.0000111			13C-OCDD		0.99	17 - 157	
OCDD	0.0000502				13C-2,3,7,8-TCDF	CDF	83.5	24 - 169	
2,3,7,8-TCDF	ND	0.000000852	352		13C-1,2,3,7,8-PeCDF	eCDF	72.7	24 - 185	
1,2,3,7,8-PeCDF	ND	0.0000012	66		13C-2,3,4,7,8-PeCDF	PeCDF	72.0	21 - 178	
2,3,4,7,8-PeCDF	ND	0.0000014	15		13C-1,2,3,4,7,8-HxCDF	-HxCDF	72.1	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.0000000	121		13C-1,2,3,6,7,8-HxCDF	-HxCDF	70.1	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.0000010	)5		13C-2,3,4,6,7,8-HxCDF	-HxCDF	71.8	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.0000010	9(		13C-1,2,3,7,8,9-HxCDF	-HxCDF	75.9	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.0000014	53		13C-1,2,3,4,6,7,8-HpCDF	',8-HpCDF	69.2	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.00000184	34		13C-1,2,3,4,7,8,9-HpCDF	3,9-HpCDF	75.0	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000240	01		13C-OCDF		66.3	17 - 157	
OCDF	ND	0.00000491	)1		CRS 37CI-2,3,7,8-TCDD	CDD	87.5	35 - 197	
Totals					Footnotes				
Total TCDD	ND	0.00000163	53		a. Sample specific estimated detection limit.	ted detection limit.			
Total PeCDD	ND	0.00000217	7		b. Estimated maximum possible concentration.	ossible concentration.			
Total HxCDD	ND	0.00000351	51		c. Method detection limit.				
Total HpCDD	ND		0.00000833	333	d. Lower control limit - upper control limit.	pper control limit.			
Total TCDF	ND	0.000000852	352						
Total PeCDF	ND	0.0000013	37						
Total HxCDF	ND	0.00000110	0						
Total HpCDF	ND	0.00000209	6(						
· ·					Assessment Dr.	1 1 1	•	02.00	(

William J. Luksemburg 12-Dec-2008 10:50 Approved By: Analyst: MAS

Project 31223

### **APPENDIX**

Project 31223 Page 7 of 217

# DATA QUALIFIERS & ABBREVIATIONS

B This compound was also detected in the method blank.

D Dilution

E The amount detected is above the High Calibration Limit.

P The amount reported is the maximum possible concentration due to possible

chlorinated diphenylether interference.

H The signal-to-noise ratio is greater than 10:1.

I Chemical Interference

J The amount detected is below the Low Calibration Limit.

\* See Cover Letter

**Conc.** Concentration

DL Sample-specific estimated detection limit

MDL The minimum concentration of a substance that can be measured and

reported with 99% confidence that the analyte concentration is greater

than zero in the matrix tested.

**EMPC** Estimated Maximum Possible Concentration

NA Not applicable

RL Reporting Limit – concentrations that correspond to low calibration point

ND Not Detected

**TEQ** Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

# **CERTIFICATIONS**

Accrediting Authority	Certificate Number
State of Alaska, DEC	CA413-2008
State of Arizona	AZ0639
State of Arkansas, DEQ	08-043-0
State of Arkansas, DOH	Reciprocity through CA
State of California – NELAP Primary AA	02102CA
State of Colorado	N/A
State of Connecticut	PH-0182
State of Florida, DEP	E87777
State of Indiana Department of Health	C-CA-02
Commonwealth of Kentucky	90063
State of Louisiana, Health and Hospitals	LA08000
State of Louisiana, DEQ	01977
State of Maine	2008024
State of Michigan	9932
State of Mississippi	Reciprocity through CA
Naval Facilities Engineering Service Center	NFESC413
State of Nevada	CA004132007A
State of New Jersey	CA003
State of New Mexico	Reciprocity through CA
State of New York, DOH	11411
State of North Carolina	06700
State of North Dakota, DOH	R-078
State of Oklahoma	D9919
State of Oregon	CA200001-006
State of Pennsylvania	68-00490
State of South Carolina	87002001
State of Tennessee	TN02996
State of Texas	T104704189-08-TX
U.S. Army Corps of Engineers	N/A
State of Utah	CA16400
Commonwealth of Virginia	00013
State of Washington	C1285
State of Wisconsin	998036160
State of Wyoming	8TMS-Q

#### **SUBCONTRACT ORDER**

## TestAmerica Irvine **IRK2828**

**SENDING LABORATORY:** 

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 260-3297

Project Manager: Joseph Doak

**RECEIVING LABORATORY:** 

Vista Analytical Laboratory-SUB

1104 Windfield Way

El Dorado Hills, CA 95762 Phone: (916) 673-1520

Fax: (916) 673-0106

Project Location: CA - CALIFORNIA

Receipt Temperature: 24 °C

Ice:

Analysis	<u>Units</u>	Due	Expires	Comments
Sample ID: IRK2828-01	Water		Sampled: 11/26/08 13:30	
1613-Dioxin-HR-Alta	ug/l	12/09/08	12/03/08 13:30	J flags,17 congeners,no TEQ,ug/L,sub=Vista
Level 4 Data Package - Out	N/A	12/09/08	12/24/08 13:30	1 2 3,09/2,000 11000
Containers Supplied: 1 L Amber (C) 1	L Amber (D)			

Date/Time

Received By

Date/Time

349age 1 of 1

Project 31223

Released By

Date/Time

# SAMPLE LOG-IN CHECKLIST



	Date/Time			Initials:		Locat	ion: WR	-2			
Samples Arrival:	11/29/09	ર્જ <i>૮</i> —_	X59	20	3	Shelf/Rack: N/A					
Logged In:	Date/Time	0	908	Initials:		Locat	ion: Rack:	2-2			
Delivered By:	FedEx	UF	PS	Cal	DHI	-	Hand Delivered	Other			
Preservation:	(Ice)		В	lue Ice	D	ry Ice		None			
Temp °C 2.4		Time	091	0		Thermometer ID: IR-1					

A TOTAL MANAGEME					YES	NO	NA
Adequate Sample Volume Rece	ived? (A-	& Blast	les for e	ach)		/	
Holding Time Acceptable?							
Shipping Container(s) Intact?							
Shipping Custody Seals Intact?		<u>,</u>	3.7				
Shipping Documentation Presen	t?	•		.*			
Airbill Trk # 7	971 443	37 6636				/	,
Sample Container Intact?				-			
Sample Custody Seals Intact?							
Chain of Custody / Sample Docu	ımentation P	resent?					
COC Anomaly/Sample Acceptar	nce Form cor	mpleted?		:	_		
If Chlorinated or Drinking Water	Samples, Ac	ceptable Pres	servation?				
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Preservation Documen	ted?	coc		nple tainer_		None	
Shipping Container	Vista	Client	Retain	Re	turn	Disp	ose

Comments:

# **APPENDIX G**

# **Section 6**

Outfall 006 - BMP Effectiveness, November 26, 2008 Test America Analytical Laboratory Report



#### LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing Project: BMP Effectiveness Monitoring Program

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly Sampled: 11/26/08

Received: 11/28/08

Issued: 12/09/08 14:54

#### NELAP #01108CA California ELAP#2706 CSDLAC #10256 AZ #AZ0671 NV #CA01531

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

#### SAMPLE CROSS REFERENCE

#### ADDITIONAL

INFORMATION: There is no data reported for IRK2873-07 sample description 006 EFF-7. The sample bottle leaked due to a small hole in the bottom causing a complete loss of sample.

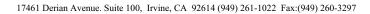
CLIENT ID	MATRIX
006 EFF-1	Water
006 EFF-2	Water
006 EFF-3	Water
006 EFF-4	Water
006 EFF-5	Water
006 EFF-6	Water
006 EFF-7	Water
006 EFF-8	Water
006 EFF-9	Water
006 EFF-10	Water
	006 EFF-1 006 EFF-2 006 EFF-3 006 EFF-4 006 EFF-5 006 EFF-6 006 EFF-7 006 EFF-8

Reviewed By:

**TestAmerica Irvine** 

Joseph Dock

Joseph Doak Project Manager





MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: BMP Effectiveness

Monitoring Program

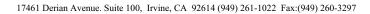
Report Number: IRK2873

Sampled: 11/26/08

Received: 11/28/08

#### **INORGANICS**

		1111	JNGA	NICS					
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRK2873-01 (006 EFF-1 - W Reporting Units: g/cc	ater)								
Density	Displacement	8L09076	N/A	NA	1.0	1	12/09/08	12/09/08	
Sample ID: IRK2873-02 (006 EFF-2 - W Reporting Units: g/cc	ŕ								
Density	Displacement	8L09076	N/A	NA	1.0	1	12/09/08	12/09/08	
Sample ID: IRK2873-03 (006 EFF-3 - W Reporting Units: g/cc		81 0007 <i>C</i>	NT/A	NIA	1.0	1	12/00/09	12/00/09	
Density	Displacement	8L09076	N/A	NA	1.0	1	12/09/08	12/09/08	
Sample ID: IRK2873-04 (006 EFF-4 - W Reporting Units: g/cc Density	ater)  Displacement	8L09076	N/A	NA	1.0	1	12/09/08	12/09/08	
·	•	0L09070	1 <b>\</b> /A	INA	1.0	1	12/09/08	12/09/08	
Sample ID: IRK2873-05 (006 EFF-5 - W Reporting Units: g/cc	ŕ	01.00056	27/4	27.4	4.0		12/00/00	10/00/00	
Density	Displacement	8L09076	N/A	NA	1.0	1	12/09/08	12/09/08	
Sample ID: IRK2873-06 (006 EFF-6 - W Reporting Units: g/cc	ater)								
Density	Displacement	8L09076	N/A	NA	1.0	1	12/09/08	12/09/08	
Sample ID: IRK2873-08 (006 EFF-8 - W Reporting Units: g/cc	ater)								
Density	Displacement	8L09076	N/A	NA	0.99	1	12/09/08	12/09/08	
Sample ID: IRK2873-09 (006 EFF-9 - W Reporting Units: g/cc	ater)								
Density Density	Displacement	8L09076	N/A	NA	1.0	1	12/09/08	12/09/08	
Sample ID: IRK2873-10 (006 EFF-10 - V Reporting Units: g/cc	Vater)								
Density	Displacement	8L09076	N/A	NA	1.0	1	12/09/08	12/09/08	
Sample ID: IRK2873-01 (006 EFF-1 - W	ater)								
Reporting Units: mg/l Sediment	ASTM D3977	8L09085	10	10	22	1	12/09/08	12/09/08	
Scument	A31W1 D39//	000000	10	10	LL	1	12/09/08	12/09/08	





MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Project ID: BMP Effectiveness

Monitoring Program

Report Number: IRK2873

Sampled: 11/26/08

Received: 11/28/08

#### **INORGANICS**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRK2873-02 (006 EFF-2 -	Water)								
Reporting Units: mg/l	,								
Sediment	<b>ASTM D3977</b>	8L09085	10	10	11	1	12/09/08	12/09/08	
Sample ID: IRK2873-03 (006 EFF-3 -	Water)								
Reporting Units: mg/l	ŕ								
Sediment	ASTM D3977	8L09085	10	10	ND	1	12/09/08	12/09/08	
Sample ID: IRK2873-04 (006 EFF-4 -	Water)								
Reporting Units: mg/l									
Sediment	ASTM D3977	8L09085	10	10	ND	1	12/09/08	12/09/08	
Sample ID: IRK2873-05 (006 EFF-5 -	Water)								
Reporting Units: mg/l									
Sediment	ASTM D3977	8L09085	10	10	ND	1	12/09/08	12/09/08	
Sample ID: IRK2873-06 (006 EFF-6 -	Water)								
Reporting Units: mg/l									
Sediment	ASTM D3977	8L09085	10	10	ND	1	12/09/08	12/09/08	
Sample ID: IRK2873-08 (006 EFF-8 -	Water)								
Reporting Units: mg/l									
Sediment	ASTM D3977	8L09085	10	10	11	1	12/09/08	12/09/08	
Sample ID: IRK2873-09 (006 EFF-9 -	Water)								
Reporting Units: mg/l									
Sediment	ASTM D3977	8L09085	10	10	ND	1	12/09/08	12/09/08	
Sample ID: IRK2873-10 (006 EFF-10	- Water)								
Reporting Units: mg/l									
Sediment	ASTM D3977	8L09085	10	10	ND	1	12/09/08	12/09/08	



THE LEADER IN ENVIRONMENTAL TESTING 17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: BMP Effectiveness

Monitoring Program

Report Number: IRK2873 Received: 11/28/08

Sampled: 11/26/08

#### METHOD BLANK/QC DATA

#### **INORGANICS**

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 8L09076 Extracted: 12/09/	08										
Duplicate Analyzed: 12/09/2008 (8L09	076-DUP1)				Sou	rce: IRK	2873-01				
Density	1.01	NA	N/A	g/cc		1.01			0	20	



THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: BMP Effectiveness

Monitoring Program Sampled: 11/26/08

Report Number: IRK2873 Received: 11/28/08

Arcadia, CA 91007 Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

### DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

**RPD** Relative Percent Difference



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Sampled: 11/26/08

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: BMP Effectiveness

Monitoring Program

Report Number: IRK2873 Received: 11/28/08

#### **Certification Summary**

#### **TestAmerica Irvine**

Method	Matrix	Nelac	California
ASTM D3977	Water		
Displacement	Water		

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

34つ Page 1 of 1			Field readings:	Z = dma_	42 2	of rea	Commonte												73 00	000	11,600				Time around Time. (Abodi)	24 Hours 5 Days	48 Hours 10 Days	72 Hours Normal X	Sample Integrity: (check)	Intact On Ice:	3/4.3
	ANALYSIS REQUIRED																								7 Date/Time:	Sh: 6 / So-tr-11	Date/Time:	[AT 11-27-08/13:13	Time:	0000 0000	7.7
CHAIN OF CUSTODY FORM	g BMP	Monitoring	-M-	tr TSA ,	Jəu	 nibə2 be	ende	Preservative Bottle # SCO397	None 1 X	2	3	None 4 X		0 1		∞ (	6	None 10 X							Received By	Jan Holl	Regeived By	Peceiving they	Received By	January)	T. A.
	Project: <b>Boein</b>	Effectiveness Monitoring	Program		- - -		(626) 568-6515	# of Sampling Cont. Date/Time	11/26/08-1245	11/26/08-1345	11/26/08-1445	1 11/26/08-1545	11/26/09-1043	11/26/06-1743	11/26/06-1043	11/20/08-1945		1 11/26/08-2145						~	Date/Time:	5.5	Date/Time:	S1:81/30-42-	Date/Time:	30/82/11 01/108	
Test America Version 12/20/07	Client Name/Address:	cadia	618 Michillinda Avenue, Suite 200 Arcadia, CA 91007	Test America Contact:losenh Doak	od contact: cocopii codi	Project Manager: Bronwyn Kelly Sampler: A	300000000000000000000000000000000000000	Sample Container n Matrix	W 500 mL Poly			W 500 mL Poly						W 500 mL Poly							10-10	?		nerge ()	1	7 101 0	
Test Ar	Client Nan	MWH-Arcadia	618 Michilli	Test Americ		Project INE Sampler:		Sample Description	006 EFF-1	006 EFF-2	006 EFF-3	006 EFF-4	000 51 1-3	000 EI 1 -0	000 1110	000 1110	006 EFF-9	006 EFF-10							Relipquished B	3	Rejinguished By	Jan Jan	Relinquished By	From So	

4.3/4.3

# **APPENDIX G**

# **Section 7**

Outfall 006, December 15, 2008

MECX Data Validation Reports



# DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: IRL1709

Prepared by

MEC<sup>X</sup>, LP 12269 East Vassar Drive Aurora, CO 80014

Project: SSFL NPDES DATA VALIDATION REPORT SDG: IRL1709

#### I. INTRODUCTION

Task Order Title: **Boeing SSFL NPDES** 

Contract Task Order: 1261.100D.00

Sample Delivery Group: IRL1709 Project Manager: B. Kelly

Matrix: Water

QC Level: IV No. of Samples: 1

No. of Reanalyses/Dilutions:

Laboratory: TestAmerica-Irvine

**Table 1. Sample Identification** 

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 006	IRL1709-01	D8L170218-001, F8L170169-001, 31266-001	Water	12/15/08 0833	245.1, 245.1 (Diss.), 900.0, 901.1, 903.0, 904.0, 905.0, 906.0, 908.0, 1613B

### **II. Sample Management**

The samples were received at TestAmerica-Irvine, TestAmerica-St. Louis, and Vista within the temperature limit of 4 ±2°C and received at TestAmerica-Denver below the control limit; however, the samples were not noted to be damaged or frozen. According to the case narrative for this SDG, the samples were received intact at all laboratories. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the sample was couriered to TestAmerica-Irvine, custody seals were not required. Custody seals were intact upon arrival at TestAmerica-Denver, TestAmerica-St. Louis and Vista. If necessary, the client ID was added to the sample result summary by the reviewer.

1

DATA VALIDATION REPORT Project: SSFL NPDES SDG: IRL1709

# **Data Qualifier Reference Table**

Qualifier	Organics	Inorganics
	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

DATA VALIDATION REPORT Project: SSFL NPDES SDG: IRL1709

# **Qualification Code Reference Table**

Qualifier	Organics	Inorganics
Н	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
С	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
В	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
Е	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
Α	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
Т	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

3

DATA VALIDATION REPORTProject:SSFL NPDESSDG:IRL1709

# **Qualification Code Reference Table Cont.**

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
Р	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*11, *111	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

DATA VALIDATION REPORT SSFL NPDES

SSFL NPDES
SDG: IRL1709

#### III. Method Analyses

#### A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: S. Dellamia

Date Reviewed: January 21, 2009

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the  $MEC^{X}$  Data Validation Procedure for Dioxins and Furans (DVP-19, Rev. 0), USEPA Method 1613, and the National Functional Guidelines Chlorinated Dioxin/Furan Data Review (8/02).

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted and analyzed within one year of collection.
- Instrument Performance: Instrument performance criteria were met. Following are findings associated with instrument performance.
  - OC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was not analyzed prior to the initial calibration sequence or at the beginning of each analytical sequence; however, the first and last eluting congeners and isomer specificity compounds were added to the midpoint of the initial calibration and to the continuing calibration standards. The GC column performance in the calibrations was acceptable, with the height of the valley between the closely eluting isomers and 2,3,7,8-TCDD reported as less than 25%.
  - Mass Spectrometer Performance: The mass spectrometer performance was acceptable with the static resolving power greater than 10,000.
- Calibration: Calibration criteria were met.
  - o Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs ≤20% for the 16 native compounds (calibration by isotope dilution) and ≤35% for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the Method 1613 QC limits for all standards.
  - Continuing Calibration: Calibration verification (VER) consisted of a mid-level standard (CS3) analyzed at the beginning of each analytical sequence. The VERs were acceptable with the concentrations within the acceptance criteria listed in Table 6 of EPA Method 1613. The ion abundance ratios and relative retention times were within the method QC limits.
- Blanks: The method blank had no target compound detects above the EDL.

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Project: SSFL NPDES DATA VALIDATION REPORT SDG: IRL1709

Blank Spikes and Laboratory Control Samples: Recoveries were within the acceptance criteria listed in Table 6 of Method 1613.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
  - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
  - Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613.
- Compound Identification: Compound identification was verified. The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613.
- Compound Quantification and Reported Detection Limits: Compound quantitation was verified by recalculating any sample detects and a representative number of blank spike concentrations. The laboratory calculated and reported compound-specific detection limits. OCDD detected below the laboratory lower calibration level in sample Outfall 006 was qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Nondetects are valid to the estimated detection limit (EDL).

#### В. **EPA METHOD 245.1—Mercury**

Reviewed By: P. Meeks

Date Reviewed: January 6, 2009

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MECX Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0), EPA Method 245.1, and the National Functional Guidelines for Inorganic Data Review (10/04).

- Holding Times: The analytical holding time, 28 days for mercury, was met.
- Tuning: Not applicable to this method.
- Calibration: Calibration criteria were met. The mercury initial calibration r<sup>2</sup> value was ≥0.995 and all initial and continuing calibration recoveries were within 85-115%. The CRA and check standard were recovered within the control limit of 70-130%.
- Blanks: There were no applicable detects in the method blanks or CCBs.

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Project: SSFL NPDES DATA VALIDATION REPORT SDG IRL1709

Interference Check Samples: Not applicable to this method.

- Blank Spikes and Laboratory Control Samples: The recovery was within the laboratoryestablished QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy was evaluated based on LCS results.
- Serial Dilution: No serial dilution analyses were performed on the sample in this SDG.
- Internal Standards Performance: Not applicable to this method.
- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summaries were verified against the raw data. No transcription errors or calculation errors were noted. Detects reported below the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
  - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
  - Field Duplicates: There were no field duplicate samples identified for this SDG.

#### C. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: January 26, 2009

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the EPA Methods 900.0, 901.1, 903.1, 904.0, 905.0, and 906.0, ASTM Method D-5174, and the National Functional Guidelines for Inorganic Data Review (2/94).

Holding Times: The tritium sample was analyzed within 180 days of collection. Aliquots for gross alpha and gross beta were prepared within the five-day analytical holding time for unpreserved samples. Aliquots for radium-226, radium-228, strontium-90, and total uranium were prepared within the five-day holding time for unpreserved samples. The aliquot for gamma spectroscopy was prepared beyond the five-day holding time for

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Project: SSFL NPDES DATA VALIDATION REPORT SDG: IRL1709

unpreserved samples; therefore, the nondetected results for these analytes were qualified as estimated, "UJ."

Calibration: The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

The gross alpha detector efficiency was less than 20%; therefore, gross alpha detected in the sample was qualified as an estimated detect, "J." The gross beta detector efficiency was greater than 20%.

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. The tritium detector efficiency for the sample was at least 20% and was considered acceptable. The strontium chemical yield was at least 60% and was considered acceptable. The strontium and radium-226 continuing calibration results were within the laboratory control limits. The radium-228 tracer, yttrium oxalate, yields were greater than 70%. The gamma spectroscopy analytes were determined at the maximum photopeak energy. The kinetic phosphorescence analyzer (KPA) was calibrated immediately prior to the sample analysis. All KPA calibration check standard recoveries were within 90-110% and were deemed acceptable.

- Blanks: Radium-226 and radium-228 were detected in the method blanks but were not detected in the sample. There were no other analytes detected in the method blanks.
- Blank Spikes and Laboratory Control Samples: The radium-226 LCS recovery was 52%; therefore, the nondetected result for radium-226 was qualified as estimated, "UJ." The radium-226 and radium-228 LCS/LCSD RPDs were 53% and 38%, respectively; therefore, the nondetected results for radium-226 and radium-228 were qualified as estimated, "UJ." The remaining recoveries and the strontium-90 RPD were within laboratory-established control limits.
- Laboratory Duplicates: Laboratory duplicate analyses were performed on the sample in this SDG for gross alpha, gross beta, cesium-137, potassium-40, and strontium-90. The RPD for gross alpha was within the laboratory-established control limit. All remaining analytes were not detected in either the sample or the duplicate.
- Matrix Spike/Matrix Spike Duplicate: Matrix spike analyses were performed on the sample in this SDG for gross alpha and gross beta. The recoveries were within the laboratory established control limits.
- Sample Result Verification: An EPA Level IV review was performed for the sample in this data package. The sample results and MDAs reported on the sample result form were verified against the raw data and no calculation or transcription errors were noted. Total uranium, normally reported in aqueous units, was converted to pCi/L using a conversion factor for naturally occurring uranium. Detects reported below the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDA.

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SSFL NPDES Project: SDG: DATA VALIDATION REPORT IRL1709

Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

- o Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
- o Field Duplicates: There were no field duplicate samples identified for this SDG.

Analyst: MAS

Data	Test America-Irvine CA	* IS	Sample Data	•	Laboratory Data		,		
Project: IRL1709	709	2 >	Matrix:	Aqueous	Lab Sample:	31266-001	Date Received:	eived:	17-Dec-08
llected: bllected:	15-Dec-08 0935	S	Sample Size:	1.04 L	QC Batch No.: Date Analyzed DB-5:	1770 18-Dec-08	Date Extracted: Date Analyzed I	Date Extracted: Date Analyzed DB-225:	17-Dec-08 NA
Analyte	Conc. (ug/L)	DL a	EMPC <sup>b</sup>	Qualifiers	Labeled Standard	ard	%R	LCL-UCLd	Qualifiers
2,3,7,8-TCDD	ND UN	0.000000654	4		IS 13C-2,3,7,8-TCDD	)D	99.5	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000326			13C-1,2,3,7,8-PeCDD	CDD	110	25 - 181	
1,2,3,4,7,8-HxCDD	ND .	0.00000285			13C-1,2,3,4,7,8-HxCDD	HxCDD	88.6	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000277			13C-1,2,3,6,7,8-HxCDD	HxCDD	97.9	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000261			13C-1,2,3,4,6,7,8-HpCDD	3-HpCDD	93.8	23 - 140	
1,2,3,4,6,7,8-HpCDD	ND ←	0.00000500	,		13C-OCDD		81.0	17 - 157	
OCDD	0.0000297 J DNG	ש		J	13C-2,3,7,8-TCDF	)F	99.3	24 - 169	
2,3,7,8-TCDF	ND U	0.000000568	•		13C-1,2,3,7,8-PeCDF	CDF	101	24 - 185	
1,2,3,7,8-PeCDF	ND -	0.00000214			13C-2,3,4,7,8-PeCDF	CDF	103	21 - 178	
2,3,4,7,8-PeCDF	ND	0.00000216			13C-1,2,3,4,7,8-HxCDF	HxCDF	88.3	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.000000772	2		13C-1,2,3,6,7,8-HxCDF	HxCDF	85.9	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.000000849			13C-2,3,4,6,7,8-HxCDF	AxCDF	88.6	28 - 136	
2,3,4,6,7,8-HxCDF	AB AB	0.000000996	<b>o</b> 1		13C-1,2,3,7,8,9-HxCDF	±xCDF	93.6	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000152			13C-1,2,3,4,6,7,8-HpCDF	-HpCDF	88.1	28 - 143	
1,2,3,4,6,7,8-HpCDF	AP .	0.00000156			13C-1,2,3,4,7,8,9-HpCDF	-HpCDF	90.5	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000196			13C-OCDF		83.8	17 - 157	
OCDF	ND +	0.00000212			CRS 37CI-2,3,7,8-TCDD	מט	91.0	35 - 197	
Totals					Footnotes				
Total TCDD	ND IV	0.000000654	-		a. Sample specific estimated	detection limit.			
Total PeCDD	AB —	0.00000326			b. Estimated maximum possible concentration.	ible concentration.			
Total HxCDD	ND	0.00000274			c. Method detection limit.				
Total HpCDD	A	0.00000813			d. Lower control limit - upper control limit.	er control limit.			
Total TCDF	ND	0.000000568							
Total PeCDF	ND C	0.00000215							
Total HxCDF	ND	0.00000101							
Total HnCDF	ND ←	0.00000174							

LEVEL IV

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Approved By:

William J. Luksemburg 19-Dec-2008 11:15



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

Attention: Bronwyn Kelly

Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200

Sampled: 12/15/08

Arcadia, CA 91007

Report Number: IRL1709

Received: 12/15/08

## MCAWW 245.1

Analyte		Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRL1709-	-01 (Outfall 00	6 - Water) - cont.								
Reporting Units:	ug/L									
Mercury	U	MCAWW 245.1	8353495	0.027	0.2	ND	1	12/18/08	12/18/08	

LEVEL IV

TestAmerica Irvine

Joseph Doak Project Manager



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200

Report Number: IRL1709

Sampled: 12/15/08

Received: 12/15/08

Attention: Bronwyn Kelly

Arcadia, CA 91007

MCAWW 245.1-Diss

Analyte		Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRL1	709-01 (Outfa	ill 006 - Water) - cont.								
Reporting Un	nits: ug/L									
Mercury-diss	U	MCAWW 245.1-Diss	8353517	0.027	0.2	ND	1	12/18/08	12/18/08	

LEVEL IV

TestAmerica Irvine

Joseph Doak Project Manager

# Outfall 006

## TestAmerica Irvine

## Client Sample ID: IRL1709-01

## Radiochemistry

Lab Sample ID: F8L170169-001 Work Order:

Matrix:

K4VJ8 WATER Date Collected:

12/15/08 0935

Date Received:

12/17/08 0930

Parameter	Result	Qual	Total Uncert. (2 g+/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & Hits	by EPA 901	.1 MOD	pC	i/L	Batch #	8359107	Yld %
Cesium 137 UJ/H	2.1	σ	8.2	20.0	15	12/24/08	01/10/09
Potassium 40 🌵 🖟	-50	U	480		250	12/24/08	01/10/09
Gross Alpha/Beta EP	A 900		pC	i/L	Batch #	8353165	Yld %
Gross Alpha J/R, DNG	2.3	J	1.1	3.0	1.3	12/18/08	12/21/08
Gross Beta	4.10		0.95	4.00	0.98	12/18/08	12/21/08
Radium 226 by EPA	903.0 MOD		р	ci/L	Batch #	8352386	Yld % 46
Radium (226) U丁/L: 村工	0.11	υ	0.22	1.00	0.37	12/17/08	01/09/09
Radium 228 by GFPC	EPA 904 MOI	)	pC	ci/L	Batch #	8352387	Yld % 37
Radium 228 U丁/长江		U	0.57	1.00	0.98	12/17/08	01/09/09
TRITIUM (Distill) b	y EPA 906.0	MOD	pC	ci/L	Batch #	9012073	Yld %
Tritium ()	80 .	U	200	500	340	01/12/09	01/13/09
SR-90 BY GFPC EPA-	905 MOD		po	Ci/L	Batch #	8352461	Yld % 61
Strontium 90 U	-0.04	U	0.38	3.00	0.65	12/17/08	01/10/09
Total Uranium by KP	A ASTM 5174	i-91	po	ci/L	Batch #	8354127	Yld %
Total Uranium	0.176	U	0.018	0.693	0.21		12/21/08

LEVEL IV

Data are incomplete without the case narrative.

MDC is determined by instrument performance only. Bold results are greater than the MDC.

Result is greater than sample detection limit but less than stated reporting limit.

Result is less than the sample detection limit.

# **APPENDIX G**

## **Section 8**

Outfall 006, December 15, 2008
Test America Analytical Laboratory Report



## LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing Project: Routine Outfall 006

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly Sampled: 12/15/08

Received: 12/15/08

Issued: 01/29/09 13:58

### NELAP #01108CA California ELAP#2706 CSDLAC #10256 AZ #AZ0671 NV #CA01531

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

#### SAMPLE CROSS REFERENCE

SUBCONTRACTED: Refer to the last page for specific subcontract laboratory information included in this report.

ADDITIONAL

INFORMATION: This report has been revised to correct the Total Uranium units to pCi/L per client request (the original

incorrect report from TestAmerica St. Louis Laboratory has been removed).

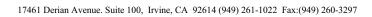
LABORATORY IDCLIENT IDMATRIXIRL1709-01Outfall 006Water

Reviewed By:

**TestAmerica Irvine** 

Trupti Mistry For Joseph Doak Project Manager

history





MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Routine Outfall 006

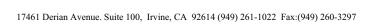
Sampled: 12/15/08

Report Number: IRL1709

Received: 12/15/08

## **METALS**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRL1709-01 (Outfall 006 - W	ater)								
Reporting Units: ug/l									
Antimony	EPA 200.8	8L16092	0.20	2.0	0.39	1	12/16/08	12/17/08	J
Cadmium	EPA 200.8	8L16092	0.11	1.0	0.11	1	12/16/08	12/17/08	J
Copper	EPA 200.8	8L16092	0.75	2.0	2.0	1	12/16/08	12/17/08	
Lead	EPA 200.8	8L16092	0.30	1.0	1.1	1	12/16/08	12/17/08	
Thallium	EPA 200.8	8L16092	0.20	1.0	ND	1	12/16/08	12/17/08	





MWH-Pasadena/Boeing

Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200

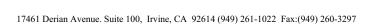
Report Number: IRL1709 Sampled: 12/15/08
Received: 12/15/08

Attention: Bronwyn Kelly

Arcadia, CA 91007

## **DISSOLVED METALS**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRL1709-01 (Outfall 006	- Water) - cont.								
Reporting Units: ug/l									
Antimony	EPA 200.8-Diss	8L17121	0.20	2.0	0.47	1	12/17/08	12/18/08	B, J
Cadmium	EPA 200.8-Diss	8L17121	0.11	1.0	ND	1	12/17/08	12/18/08	
Copper	EPA 200.8-Diss	8L17121	0.75	2.0	1.1	1	12/17/08	12/18/08	B, J
Lead	EPA 200.8-Diss	8L17121	0.30	1.0	ND	1	12/17/08	12/18/08	
Thallium	EPA 200.8-Diss	8L17121	0.20	1.0	ND	1	12/17/08	12/18/08	





MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Routine Outfall 006

Sampled: 12/15/08

Report Number: IRL1709 Received: 12/15/08

## **INORGANICS**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRL1709-01 (Outfall 006 - \)	Water) - cont.								
Reporting Units: mg/l									
Hexane Extractable Material (Oil &	EPA 1664A	8L19123	1.4	4.9	3.9	1	12/19/08	12/19/08	J
Grease)									
Chloride	EPA 300.0	8L15075	0.25	0.50	23	1	12/15/08	12/16/08	
Nitrate/Nitrite-N	EPA 300.0	8L16086	0.15	0.26	6.4	1	12/16/08	12/16/08	
Sulfate	EPA 300.0	8L15075	0.20	0.50	18	1	12/15/08	12/16/08	
<b>Total Dissolved Solids</b>	SM2540C	8L16052	10	10	160	1	12/16/08	12/17/08	



MWH-Pasadena/Boeing

Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200

Sampled: 12/15/08 Report Number: IRL1709 Received: 12/15/08 Arcadia, CA 91007

Attention: Bronwyn Kelly

## **DIOXIN (EPA 1613)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRL1709-01 (Outfall 0	06 - Water) - cont.								
Reporting Units: ug/L	,								
2,3,7,8-TCDD	1613-Dioxin-HR Alta	1770	).0000006	50.00000481	ND	1	12/17/08	12/18/08	
1,2,3,7,8-PeCDD	1613-Dioxin-HR Alta	1770	0.0000032	260.0000240	ND	1	12/17/08	12/18/08	
1,2,3,4,7,8-HxCDD	1613-Dioxin-HR Alta	1770	0.0000028	350.0000240	ND	1	12/17/08	12/18/08	
1,2,3,6,7,8-HxCDD	1613-Dioxin-HR Alta	1770	0.0000027	770.0000240	ND	1	12/17/08	12/18/08	
1,2,3,7,8,9-HxCDD	1613-Dioxin-HR Alta	1770	0.0000026	510.0000240	ND	1	12/17/08	12/18/08	
1,2,3,4,6,7,8-HpCDD	1613-Dioxin-HR Alta	1770	0.000003	0.0000240	ND	1	12/17/08	12/18/08	
OCDD	1613-Dioxin-HR Alta	1770	0.0000024	150.0000481	0.0000297	1	12/17/08	12/18/08	Ja
2,3,7,8-TCDF	1613-Dioxin-HR Alta	1770	).0000005	60.00000481	ND	1	12/17/08	12/18/08	
1,2,3,7,8-PeCDF	1613-Dioxin-HR Alta	1770	0.000002	140.0000240	ND	1	12/17/08	12/18/08	
2,3,4,7,8-PeCDF	1613-Dioxin-HR Alta	1770	0.000002	160.0000240	ND	1	12/17/08	12/18/08	
1,2,3,4,7,8-HxCDF	1613-Dioxin-HR Alta	1770	).0000007	720.0000240	ND	1	12/17/08	12/18/08	
1,2,3,6,7,8-HxCDF	1613-Dioxin-HR Alta	1770	).0000008	490.0000240	ND	1	12/17/08	12/18/08	
2,3,4,6,7,8-HxCDF	1613-Dioxin-HR Alta	1770	).0000009	960.0000240	ND	1	12/17/08	12/18/08	
1,2,3,7,8,9-HxCDF	1613-Dioxin-HR Alta	1770	0.0000013	520.0000240	ND	1	12/17/08	12/18/08	
1,2,3,4,6,7,8-HpCDF	1613-Dioxin-HR Alta	1770	0.0000013	560.0000240	ND	1	12/17/08	12/18/08	
1,2,3,4,7,8,9-HpCDF	1613-Dioxin-HR Alta	1770	0.0000019	960.0000240	ND	1	12/17/08	12/18/08	
OCDF	1613-Dioxin-HR Alta	1770	0.000002	120.0000481	ND	1	12/17/08	12/18/08	
Total TCDD	1613-Dioxin-HR Alta	1770	.00000065	540.00000481	ND	1	12/17/08	12/18/08	
Total PeCDD	1613-Dioxin-HR Alta	1770	.0000032	6 0.0000240	ND	1	12/17/08	12/18/08	
Total HxCDD	1613-Dioxin-HR Alta	1770	.0000026	1 0.0000240	ND	1	12/17/08	12/18/08	
Total HpCDD	1613-Dioxin-HR Alta	1770	.000005	0.0000240	ND	1	12/17/08	12/18/08	
Total TCDF	1613-Dioxin-HR Alta	1770	.00000056	580.00000481	ND	1	12/17/08	12/18/08	
Total PeCDF	1613-Dioxin-HR Alta	1770	.0000021	4 0.0000240	ND	1	12/17/08	12/18/08	
Total HxCDF	1613-Dioxin-HR Alta	1770	.0000007	720.0000240	ND	1	12/17/08	12/18/08	
Total HpCDF	1613-Dioxin-HR Alta	1770	.0000015	6 0.0000240	ND	1	12/17/08	12/18/08	
Surrogate: 13C-2,3,7,8-TCDD (25-					99.5 %				
Surrogate: 13C-1,2,3,7,8-PeCDD (2					110 %				
Surrogate: 13C-1,2,3,4,7,8-HxCDD					88.6 %				
Surrogate: 13C-1,2,3,6,7,8-HxCDD					97.9 %				
Surrogate: 13C-1,2,3,4,6,7,8-HpCD	DD (23-140%)				93.8 %				
Surrogate: 13C-OCDD (17-157%)					81 %				
Surrogate: 13C-2,3,7,8-TCDF (24-1					99.3 %				
Surrogate: 13C-1,2,3,7,8-PeCDF (2					101 %				
Surrogate: 13C-2,3,4,7,8-PeCDF (2	, , , , , , , , , , , , , , , , , , ,				103 %				
Surrogate: 13C-1,2,3,4,7,8-HxCDF					88.3 %				
Surrogate: 13C-1,2,3,6,7,8-HxCDF					85.9 %				
Surrogate: 13C-2,3,4,6,7,8-HxCDF					88.6 %				
Surrogate: 13C-1,2,3,7,8,9-HxCDF					93.6 %				
Surrogate: 13C-1,2,3,4,6,7,8-HpCD					88.1 %				
Surrogate: 13C-1,2,3,4,7,8,9-HpCD	PF (20-138%)				90.5 %				
Surrogate: 13C-OCDF (17-157%)					83.8 %				

## TestAmerica Irvine

Trupti Mistry For Joseph Doak Project Manager



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing Project ID: Routine Outfall 006

618 Michillinda Avenue, Suite 200 Sampled: 12/15/08

Arcadia, CA 91007 Report Number: IRL1709 Received: 12/15/08
Attention: Bronwyn Kelly

## **DIOXIN (EPA 1613)**

MDL Reporting Sample Dilution Date Data

Analyte Method Batch Limit Limit Result Factor Extracted Analyzed Qualifiers

Sample ID: IRL1709-01 (Outfall 006 - Water) - cont.

Reporting Units: ug/L

Surrogate: 37Cl-2,3,7,8-TCDD (35-197%) 91 %